REPORT RESUMES

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PROGRAM PLANNING FOR HOME ECONOMICS IN SECONDARY SCHOOLS IN MINNESOTA, GRADES 7-12, A RESOURCE UNIT IN FOODS AND NUTRITION. CURRICULUM BULLETIN NO. 12 A.

MINNESOTA STATE DEPT. OF EDUCATION, ST.PAUL

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DESCRIPTORS- *FOODS INSTRUCTION, *RESOURCE UNITS, *CURRICULUM, *NUTRITION INSTRUCTION, *HOMEMAKING EDUCATION, HIGH SCHOOLS,

CURRICULUM MATERIALS TO HELP TEACHERS IN DEVELOPING SPECIFIC PLANS FOR TEACHING FOODS AND NUTRITION IN GRADES 7 THROUGH 12 ARE PRESENTED. CLASSROOM TEACHERS, SUPERVISORS, TEACHER EDUCATORS, AND CURRICULUM DEVELOPMENT STUDENTS CONTRIBUTED TO THE STATEWIDE CURRICULUM PROJECT WHICH DEVELOPED THE MATERIALS. MAJOR CONCEPTS INCORPORATED INTO THE UNITS CONCERN (1) THE INFLUENCE OF ECONOMIC, CULTURAL, PHYSIOLOGICAL, AND PSYCHOLOGICAL FACTORS UPON THE FAMILY FOOD PATTERN, (2) CHEMICAL AND PHYSICAL PROPERTIES OF FOODS AND FACTORS AFFECTING THEIR CHANGE, AND (3) VARIETY AND AVAILABILITY OF FOODS, CONSUMER PRACTICES, AND RESOURCES MANAGEMENT. A SCOPE AND SEQUENCE CHART OUTLINES COURSE CONTENT FOR GRADES 7-12. UNITS INCLUDED ARE (1) YOU AND YOUR FOOD, GRADE 7, (2) CREATIVE FOODS, GRADE 8, (3) THE SCIENCE OF FOOD, GRADE 9, AND (4) IMPORTANCE OF FOOD, ADVANCED GRADES. EACH UNIT CONTAINS AN INTRODUCTORY STATEMENT, OBJECTIVES, GENERALIZATIONS AND CONCEPTS, CONTENT, LEARNING EXPERIENCES, AND EVALUATION IDEAS. THE APPENDIX CONTAINS REFERENCES, AUDIOVISUAL SOURCES, BULLETIN BOARD IDEAS, AN EQUIPMENT LIST, A SAFETY CHECKLIST, A CHART OF FOUR SUGGESTED LEVELS OF LEARNING IN FOOD PREPARATION, AND FORMS FOR USE IN HOME EXPERIENCES, LABORATORY AND MEAL EVALUATION, AND MEAL PLANNING. THIS DOCUMENT IS AVAILABLE FOR $1.45 FROM DOCUMENTS SECTION, STATE DEPARTMENT OF EDUCATION, ROOM 140, CENTENNIAL OFFICE BUILDING, 658 CEDAR STREET, ST. PAUL, MINNESOTA 55101. (FP)

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# PROGRAM PLANNING for HOME ECONOMICS IN SECONDARY SCHOOLS of MINNESOTA

## *A Resource Unit in Foods and Nutrition*

**Secondary School**
**Grades 7 - 12**

**CURRICULUM BULLETIN NO. 12A**

**STATE OF MINNESOTA**
**DEPARTMENT OF EDUCATION**
**St. Paul**

**1966**

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# PROGRAM PLANNING for HOME ECONOMICS IN SECONDARY SCHOOLS of MINNESOTA

Grades 7 - 12

## *A Resource Unit in Foods and Nutrition*

CURRICULUM BULLETIN NO. 12A

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1966

## MEMORANDUM

TO: The ERIC Clearinghouse on Vocational and Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio 43212

FROM: (Person) Lyla M. Mallough (Agency) Minnesota State Dept of Educ

(Address) Fourth Floor, Centennial Building, 658 Cedar Street, St. Paul, 55101

DATE: April 15, 1968

RE: (Author, Title, Publisher, Date) Program Planning for Home Economics in Secondary Schools of Minnesota, Grades 7-12, A Resource Unit in Foods and Nutrition, Minnesota State Department of Education, 1966.

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(2) Means Used to Develop Material: Three-year Curriculum Project - Teachers
Development Group developed materials in a course on curriculum taught by Dr. Fern Horn
Level of Group Secondary teachers
Method of Design, Testing, and Trial Statistical analysis of resource materials developed by teachers - administration of instruments to 300 - 1200 students depending on grade level. Tests were found to have a good range of level and difficulty.

(3) Utilization of Material:
Appropriate School Setting Jr. High and Secondary
Type of Program Foods and Nutrition
Occupational Focus general
Geographic Adaptability general
Uses of Material curriculum planning
Users of Material teachers

(4) Requirements for Using Material:
Teacher Competency Credentialled Home Economist
Student Selection Criteria Average ability - materials adaptable for variations
Time Allotment not stated

Supplemental Media --
Necessary ____ }
Desirable x } (Check Which)

Describe

Source (agency) Document and forementioned agency
(address)

# A
# RESOURCE UNIT
# IN
# FOODS AND NUTRITION

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Advanced Importance of Food

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# FOREWORD

As changes occur in society, teachers of all vocational subjects in the secondary schools examine their curriculums and the contribution being made to the lives of their students. Early in 1960 the state home economics staff, teacher educators and the home economics representatives on the State Advisory Council on Vocational Education gave much time and thought to a state-wide curriculum project. This project began in the fall of 1963 under the guidance of Dr. Fern Horn, Professor of Home Economics Education, University of Minnesota.

Classroom teachers, teacher educators, and supervisors have been actively involved in the development of the materials through curriculum classes, workshops, and in-service conferences. Teacher educators from many institutions in the state which prepare teachers of home economics have helped with the in-service meetings.

A good vocational home economics program does not just happen; it is the result of considered decisions on the part of many persons. We hope the curriculum materials will help teachers plan and implement a program that will meet the purposes of home economics education.

State Director of
Vocational Education

## ACKNOWLEDGMENTS

Grateful acknowledgment is extended to the many persons who contributed to the development of these resource materials for use by teachers of home economics in the state of Minnesota.

Dr. Fern Horn, Professor of Home Economics Education, University of Minnesota has served as director of the curriculum workshops and has coordinated the state-wide curriculum project.

Almost every home economics teacher in Minnesota, a number of the teacher educators, and some extension personnel have participated in the project, but special recognition is given to the following students who prepared materials as part of their course work in HE ED 160A, Curriculum Development, at the University of Minnesota.

Ferial Abraham
Marquita Banks
Gudwren Belkholm
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Gloria Bryhn
Eleanor Collins
Jacqueline Deal
Irene Gleason
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Marilyn Harder
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Anne Jensen
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Eleanor Johnson
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Margaret Konesky
Marilyn Manning
Barbara Marti
Janet Mauer
Mary Ann McCarthy
Judith McComb
Pauline Nickel
Judy Kay Oukrop
Hildegarde Palo
Isabel Qualls
Connie Richards
Marlene Salmela
Mary Sargent
Annah Simonson
Sister St. Catherine Maureen
Carol Skoglund
Marion Stier
Roberta Stockton
Joyce Youngren

The task of coordinating and developing any additional materials for the foods and nutrition aspects of the curriculum project was accomplished by the following teachers in a special workshop held from August 2-6, 1965, at the University of Minnesota.

Lorna Anderson
Grace Brill
Muriel Brown
Verna Mikesh
Frances Olson
Theresa Rowan
Julia S. Rowe
Marion Sederstrom
Annah Simonson
Joyce Youngren

It is believed by those who helped develop these resource materials that curriculum development is an ever-changing process.

State Supervisor of
Home Economics Education

Donald L. Clauson, Director of Curriculum

Patricia McComb, Editor

## DEVELOPMENT OF RESOURCE MATERIALS

Curriculum development is a continuous process which requires the synthesis of the bases utilized in the identification and organization of materials for teaching. The bases used in the development of the resource materials for this project are the philosophy of home economics education, socio-economic trends, and the developmental tasks of adolescence. These bases are discussed in this bulletin.

With this background, the participants studied further the development of concepts, stating of objectives, and the development and organization of educational experiences. The generalizations[1] developed by the various workshops sponsored by the Home Economics Branch of the United States Office of Education were utilized while the taxonomies[2] served as a basis for the stating of objectives, selecting of content, and organizing of experiences.

In the study of the field of home economics the importance of structure as discussed by Bruner[3] was reviewed. The following conceptual framework was then compiled from a number which were developed by various students who had used the outline developed by the national workshop participants as their basis. This framework was subsequently utilized by the state workshop participants as a basis for the scope and sequence. It was the concern of the workshop personnel to select the concepts most relevant for the various grade levels at which home economics is taught and to build upon these as a student would progress through the curriculum. After much deliberation it was decided to incorporate management, equipment, art, and relationship concepts wherever needed instead of developing separate units for these.

## USE OF RESOURCE MATERIALS

It was the intent of the director of the curriculum project to make available to classroom teachers a wide variety of ideas and suggestions to aid them in developing specific plans for teaching. There are also included a number of suggestions for home experiences and FHA activities.

The occupational aspect of the home economics program was not considered in the development of these materials. The problems families and individuals face in the area of foods and nutrition were the basis for the selection of the concepts to be incorporated.

These materials are to serve as a guide. It is not necessary to use all of the suggestions under each objective as it was the concern of those developing the materials to suggest ideas for a variety of learning situations. Teachers are expected to adapt the ideas and use them as a foundation on which to develop a program with depth and quality. Nor is it assumed that all students will cover the suggested objectives given for each grade level. Teachers will need to adjust the suggestions to fit the learners in their classrooms. It is hoped, therefore, that each teacher will plan her program to fit her situation and provide experiences that are challenging to her students and in harmony with the philosophy of home economics.

## CONCEPTUAL FRAMEWORK FOR FOODS AND NUTRITION AREA

I. Significance of food to family life
  A. Effect of cultural influence upon family food pattern
    1. Influence of family food patterns and customs upon food choices
    2. Social influence as a means of transferring "social graces"
  B. Influence of economic factors
    1. Effect of food supply
    2. Relationship of food pattern to the family budget
    3. Influence of government protection regulations

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[1] Curriculum Conference Report. Washington, D. C. Home Economics Branch, U. S. Dept. of Health, Education and Welfare.

[2] Bloom, Benj S., Krathwohl, D. R., and others. *Taxonomy of Educational Objectives:* Bk. 1, *Cognitive Domain*, 1956. Book 2, *Affective Domain.* McKay, 1964.

[3] Bruner, Jerome S. *The Process of Education.* Harvard Univ. Press, 1960.

C. Relationship of physiological and psychological needs
   1. Aesthetic appreciation of food
   2. Influence of community and peer groups on eating habits
   3. Importance of nutrient balance to health

II. Nature of foods used by the family
   A. Chemical and physical properties of food
      1. Relation of properties to flavor, texture, appearance, and aroma
      2. Classification on basis of structure and composition
      3. Relationship of properties to preparation
   B. Factors affecting change in chemical and physical properties of food
      1. Effect of presence of micro-organisms
      2. Effect of variations in processing, preservation, and storing
         a. Principles of food preparation
         b. Use of food additives
         c. Functions of ingredients and substitutions
         d. Relationship of storage factors to preservation of food

III. Provision of food for the family
   A. Variety and availability of foods
      1. Influence of technological developments in food processing
      2. Changes in agricultural practices
      3. Effect of urbanization and changes in marketing of food supplies
   B. Influence of consumer practices
      1. Effect upon marketing practices
      2. Effect upon production and quality of food
      3. Development of standards concerned with safety of foods
      4. Importance of labeling and advertising safeguards for the consumer
   C. Management of resources
      1. Effective use of equipment in relation to food preparation
      2. Techniques of management in relation to preparation and service of meals
         a. Relationship of nutritional facts to meal planning
         b. Development of good work habits
         c. Basic steps in preparation of food
         d. Building of family relationships through food preparation
      3. Development of a food budget

# SCOPE AND SEQUENCE FOR FOODS AND NUTRITION AREA

## Grades 7-12

## YOU AND YOUR FOOD — Grade 7

- I. Factors affecting menu planning and meal service
  - A. Influence of family patterns and customs on food habits
    - 1. Development of attitudes toward food
    - 2. Development of food habits
  - B. Relationship of nutrition to menu planning
    - 1. Influence of the Basic 4 on menu planning
    - 2. Relationship to personal appearance and health
    - 3. Meals for the day
  - C. Effect of food supply upon consumer choice
    - 1. Influence of buying guides
    - 2. Effect of new developments in food technology
  - D. Techniques of table service and table manners
    - 1. Methods of table setting
    - 2. Techniques of simple meal service
    - 3. Rules of table etiquette
- II. Factors influencing food preparation
  - A. Management of resources in food preparation
    - 1. Cleanliness in food preparation
    - 2. Safety in the kitchen
    - 3. Techniques of group laboratory work
    - 4. Effective use of equipment
  - B. Factors influencing the use of recipes
    - 1. Cooking terminology
    - 2. Basic techniques of measuring
  - C. Principles of preparing foods for simple meals
    - 1. Preparation of milk and fruit beverages
    - 2. Preparation of fruits and raw vegetables
    - 3. Preparation of toast and quick bread mixes
    - 4. Simple dessert cookery
    - 5. Techniques of egg and meat cookery

## CREATIVE FOODS — Grade 8

- I. Effect of social change on the diet
  - A. Change in eating patterns
  - B. Importance of nutrient balance to health
  - C. Influence of marketing facilities
- II. Management of resources in food preparation
  - A. Relationship of creativity to menu planning
  - B. Effective time management
  - C. Principles of preparing foods for moderate meals
    - 1. Preparation of hot beverages
    - 2. Preparation of quick breads
    - 3. Techniques of cereal cookery
    - 4. Preparation of casseroles
    - 5. Techniques of salad making
    - 6. Preparation of desserts

## THE SCIENCE OF FOOD — Grade 9

- I. Use of the food dollar
  - A. Influence of foods available on the market
  - B. Effect of the cost of foods available on the market
  - C. Development of food standards
    - 1. Importance of labeling
    - 2. Advertising safeguards
  - D. Use and care of special appliances
- II. Importance of nutritious meals for individuals and families
  - A. Relationship of nutrients to personal and family needs
    - 1. Effect of Basic 4
    - 2. Relationship of nutrients to daily menus
    - 3. Development of menus for one day
  - B. Scientific principles in preparing foods with heat
    - 1. Effect of nutritive loss by cooking
    - 2. Principles of batters and dough
    - 3. Principles of carbohydrate cookery
    - 4. Principles of gelatin cookery
    - 5. Principles of protein cookery
    - 6. Principles of vegetable cookery
  - C. Scientific principles in preparing foods without heat
    - 1. Nutritive value of foods prepared
    - 2. Principles of preparing frozen desserts
    - 3. Preparation of salad dressing
  - D. Food as a means of social communication
    - 1. Relationship of family food practices to other cultures
    - 2. Factors involved in entertaining

## IMPORTANCE OF FOOD — Advanced Grades

- I. Knowledge of nutrition as a basis for building or improving food patterns
  - A. Factors influencing food needs of individuals
    - 1. Effect of psychological factors
    - 2. Effect of physiological factors
      - a. Utilization of nutrients
      - b. Energy balance

- B. Food patterns of individuals and families
  - 1. Social and economic influences
  - 2. Cultural, racial, and religious influences
  - 3. Relationship of food patterns to health
- II. Importance of food purchasing practices
  - A. Provision of food
    - 1. Food production and distribution
    - 2. New developments in food processing
    - 3. Consumer protection services
  - B. Food buying patterns of families
    - 1. Food budgeting
    - 2. Meal planning based on family income
- III. Preparation and service of meals using special foods
  - A. Influence of foods from other cultures
  - B. Creativity in food preparation and service
  - C. Processed foods in the meal
  - D. Foods for special occasions
  - E. Management of resources in cooking for two
  - F. Quantity cookery
  - G. Food preservation
  - H. Use and care of appliances
- IV. Careers related to food preparation

## GRADE 7

## YOU AND YOUR FOOD

### Introductory Statement

The twelve-year old is in a period of the most rapid growth in her life. Her appetite seems insatiable so she has great interest in food. She is interested and eager in learning how to prepare meals and snacks so that she herself can enjoy them. Her primary interest in cooking is something to eat.

She likes to make and serve foods to her friends and her family. This would make her receptive to studying the topic of table setting and service. She is young enough to replace poor table manners with acceptable ones that she can learn and practice in class activities.

Because the twelve-year old is often earning some of her own money, she has more to spend on foods between meals. This is the time to guide her money management to choose snacks that are nutritious. Although still retaining some of her desire to imitate her mother, she is acquiring a new taste for independence. She is becoming interested in planning menus as her mother does for the family so this could be used to guide her in her own food choices.

### Unit Objectives:

I. Appraisal of the principles involved in meal preparation
  A. Analysis of the influence of family patterns and customs on food choices and habits
  B. Judgment of the principles of nutrition utilized in family meal planning
  C. Distinguishing the relationship between food supply and the consumer's choice of food
  D. Identification of the relationship of table service and table manners

II. Perception of the factors which influence the preparation of food in the home
  A. Identification of the effect of the management of resources on food preparation
  B. Identification of the factors which influence the use of recipes
  C. Integration of the principles of preparing foods for simple meals

I. Major Concept: Factors affecting menu planning and meal service.

Broad Objective I: Appraisal of the principles involved in meal preparation.

Broad Generalization: Menu planning and meal service will be affected by many factors.

Concept A: Influences of family patterns and customs on food habits.

Objective A: Analysis of the influence of family patterns and customs on food choices and habits.

Generalization: Family patterns and customs will influence food habits.

Concept 1: Development of attitudes toward food.

Objective 1: Comprehension of one's attitude toward his choice of food.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The kinds of foods, the way they are prepared, their grouping in meals, and even the manner in which they are served and eaten characterize the food customs that are unique to a country or region. | **Knowledge**<br>Read an episode such as father's dislike for green beans. Consider the question, "why he may have acquired this dislike." | |
| | **Comprehension**<br>Discuss closed minds some people have toward certain foods. Consider why certain attitudes toward food may have been established. Study reasons for habits and mores. Relate these factors to local practice: | Contributions. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | Food likes and dislikes of parents<br>Experiences associated with foods<br>Ideas associated with baby foods and foods for grownups<br>Tendency to distrust that with which we are unfamiliar<br>Advertising pressure from magazines, radio, and TV<br>Ideas about foods held by some to be "rich folks" foods or "poor folks" foods |  |

**Concept 2: Development of food habits.**

**Objective 2: Prediction of the effect of family patterns and customs on food choices and habits.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Specific foods, methods of preparation and serving, and time at which foods are eaten acquire symbolic meanings associated with religious beliefs, ceremonies, social usages, status, ethnic and family traditions, maturity levels and masculine and feminine roles. | **Knowledge — Comprehensive — Interest**<br>List vegetables or eggs prepared in certain ways which students do not eat. Compile a master list and choose three which most of the class dislike. Students check with parents and in cookbooks for new ways of preparing the three vegetables or eggs. |  |
| People are likely to accept a wide variety of foods if they have wide experience, knowledge, and appreciation of foods and if their environment reinforces positive rather than negative attitudes. | **Application**<br>Prepare vegetables and egg dishes at home. Discuss reactions to new methods of preparation and family reaction to the vegetable or egg dish. Discuss some of the difficulties involved in changing food practices. Consider individual diet needs and discuss food practices that people could try to overcome or establish for themselves. | Contribution to discussion. |
|  | **Bulletin Board Chart**<br>Include student names and a blank in which each student may place a picture of foods which she has added to her diet.<br>Set time limit to see who can add five or six new foods to her diet. |  |
| A wide acceptance of all kinds of food by the individual can mean easier adaptability to a varied social environment and differing economic circumstances. | **Analysis**<br>Write a paragraph telling how you overcame your dislike for certain foods and/or acquired a liking for the food you have added to your diet. | Paragraph written. |

**Concept B: Relationship of nutrition to menu planning.**

**Objective B: Judgment of the principles of nutrition utilized in family meal planning.**

**Generalization: Menu planning will be affected by one's understanding of nutrition.**

**Concept 1: Influence of the Basic 4 in menu planning.**

**Objective 1: Appraisal of the role of the Basic 4 in menu planning.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| Instinct is not reliable in food choices; how to select an adequate diet needs to be learned. | Define terms, such as: nutrition, nutrient, diet, calorie, and menu. Study bulletin board or large chart displaying Basic 4 food groups. | Objective test. |
|  | **Comprehension** |  |
|  | Discuss key points shown on the bulletin board depicting need for following the Basic 4 in the teenage years of most rapid growth. | Self-analyst: How does the Basic 4 help me personally? |
|  | **Application** |  |
| Adequate nutrition can be attained with many combinations of foods commonly available throughout the world. No single pattern is essential to health. | List foods you now neglect and add them in some form to make a more balanced diet. |  |
|  | Girls check own diets for three days in relation to main food groups to see if they are getting enough basic essentials to maintain normal health and growth. | Note change in food habits later in Food Unit. |
|  | Plan a simple menu following the Basic 4. | Check menu. |
|  | **Analysis** |  |
| The utilization of the Basic 4 in menu planning may result in a more adequate diet. | Make a survey among friends about their "snack" habits and make a possible plan for improving nutritionally poor habits in snacking. |  |
|  | Relate good eating habits to bodily health and to any individual's social and psychological well-being. |  |
|  | Buzz group discussion concerning problem of food dislikes and how one could find substitutes. "If I don't eat ———, I try to eat ———." |  |
|  | Discuss class members' usual choices when family eats at a restaurant in relation to the nutritive value of the food. |  |
|  | Write a paper analyzing the results of this discussion. | Paper. |
|  | Evaluate in class discussion excuses usually given for meal "skipping." |  |
|  | **Synthesis** |  |
|  | Use a bulletin board and the food pictures cut out previously to plan meals for a day. | Students evaluate each others' menus. |
|  | Use a flannel board and food pictures to plan menus for the day. |  |
|  | Students plan a day's diet including suggested amounts of food from the Basic 4. | Individual conference or written report on results. |
|  | This could be an actual plan for their family and used as a home experience. |  |
|  | **Evaluation** |  |
|  | Record food groups which were most often inadequate in the diets of class members. |  |
|  | Discuss reasons and possible solutions. |  |
|  | Individual projects or home experiences on one food practice to be improved. | Report by students as to success of project. |

## Concept 2: Relationship to personal appearance and health.

## Objective 2: Prediction of the effects of nutritious meals on personal appearance and health.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Nutritious meals promote growth, maintain and repair the body. | View film which shows relationship of nutrition to health. "Food, The Color of Life," University of Minnesota. | |
| | Resource person, school nurse or doctor, talk to students about nutrition in relation to health and appearance. | Oral quiz on film. |
| | **Comprehension** | |
| | Summarize the ways in which the film suggested the importance of nutrition to health and appearance. | Ability of students to summarize and put statements in their own words. |
| | Discuss the resource person's contribution and ask questions to clarify relationship of nutrition to health. | |
| | **Application** | |
| Nutrition can affect appearance by its influence on different parts of the body and the characteristics which relate to appearance. | Discuss information from references on relation of nutrition to appearance. | |
| | Arrange a display under the caption, "From Where Does Your Beauty Come?" On one side display an attractive arrangement of fruits and vegetables; on the other side face creams and cosmetics. | |
| | Discuss a popular article or pamphlet on nutrition of high school girls. | Ability of students to identify related information. |
| | Identify those statements you accept and those you question. | |
| | **Analysis** | |
| | Choose one way in which you would like to improve your personal appearance. It could be accomplished through improved nutrition: fingernails for example. | Choice of characteristics to improve.<br>Reports to class later. |
| People may wish to improve food habits when they realize the relationship of nutrition to personal apppearance and health. | Display a picture of Miss America or a healthy teenage girl, and an unhealthy girl. Discuss the figure and state of health displayed; how may these qualities have been acquired. | Observation of the extent to which students can analyze characteristics of health. |
| | Case study. Discuss relationship of health and appearance of a 12-year old girl to the foods she eats. | |

## Concept 3: Significance of breakfast, lunch, dinner, and snacks as meal patterns.

## Objective 3: Application of the principles of meal planning.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| There are many patterns of meals by which people obtain an adequate diet. | Read references on basis meal patterns. Girls bring in samples of their family's meal pattern. | |
| | **Comprehension** | |
| Note: Depends also upon cooking practices so the meal | Discuss the basic meal patterns. Discuss family meal patterns. | Contributions to discussion. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| may or may not be nutritive even though the foods appear balanced. | **Application**<br>Bulletin board of basic meal pattern using blouse pattern pieces to represent the different meals in total day's meals. | |
| Meal planning principles provide a basis for planning meal patterns. | Plan simple basic meals including snack, breakfast, lunch, dinner, based on Basic 4. | Meal pattern. |

**Concept C: Effect of food supply upon consumers' choices.**

**Objective C: Distinguishing the relationship between food supply and the consumer's choice of food.**

**Generalization: The food supply available will affect the consumers' choices of food.**

**Concept 1: Influence of buying guides.**

**Objective 1: Identification of buying guides for foods.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Foods are selected according to specific uses in the meal plan. | Read about:<br>a. Qualities of foods, color, texture, flavor.<br>b. Different types of menus.<br>View a film, "Home Management: Buying Food," McGraw-Hill, University of Minnesota. | |
| | **Comprehension** | |
| Principles of consumer buying and rules for food selection and for budgeting of expenditures aid the consumer in buying food. | In buzz groups attempt to choose foods that would best fit into some basic meal patterns.<br>Discuss meaning of "grades" in food selection.<br>Discuss selection of foods in relation to their length of storage life and plan for use in meal.<br>Discuss wisdom of planning for leftovers. Study food labels. List what the label tells and doesn't tell:<br>Brand name<br>Net weight given<br>Quality<br>Name of variety<br>Discuss how labels help shoppers. Indicate the different kinds of stores:<br>Chain<br>Supermarket<br>Independent<br>Delicatessen | |
| Food available in season, local market, home produced, home preserved and leftovers will effect consumers' choice of foods. | Recognize advantages and disadvantages of shopping at different grocery stores.<br>Discuss decisions to be made in shopping for food.<br>Buy food in season or out?<br>In what form shall I buy food?<br>What purchases shall I buy in large or small quantities?<br>What time of the day or week gives the best buys? | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Application** | |
| | Students choose one of the foods from menu to find a satisfying solution for selecting the form which best meets their present problem. Purchase it. | |
| | Write a paragraph giving reasons for selection. | Check paragraph. |
| | **Analysis** | |
| Being a well-informed and courteous shopper may influence interest in purchasing food. | Students shop for a day's food supply. Reports of these experiences are given in class. | Reports given. |
| | Girls check to see if good management was used. | |
| | Write a paragraph telling what foods were shopped for, amounts purchased, when purchased, where, and why you made the choices you did. | Paragraph analysis. |

Concept 2: Effect of new developments in food technology.

Objective 2: Prediction of the effects of new developments in food technology.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Almost every item that the homemaker in the U. S. puts in her market basket today is a convenience food because one or more steps in its preparation for use have been completed for her. | Define convenience foods. | |
| | Read references on convenience foods. | |
| | **Comprehension** | |
| | Discuss: Decisions! Decisions! When shopping with your mother or family, which product would you choose and what factors would influence your decisions in the following situations:<br>Would you buy a package of cookie mix or ready-to-bake cookie dough or the ingredients to make cookies?<br>Would you buy ground beef by the formed frozen patties or ground beef?<br>Instant pudding mix or ingredients to make a pudding? | Contributions to discussion. |
| | Write a paragraph telling about the product chosen and why it was selected. | Paragraph. |
| | Purchase a cookie mix and ready-to-bake cookie dough. Read package directions carefully. Carry out the process indicated. | |
| | **Analysis** | |
| Good products can be made from mixes and other convenience foods when directions on the container are followed carefully. | Analyze the product produced as to flavor, texture, time used. | |
| | Compare cost of these cookies with the cost of ingredients used to make cookies. | |

Concept D: Techniques of table service and table manners.

Objective D: Identification of the relationship of the techniques of table service and table manners.

Generalization: Various factors will affect table service and manners used.

Concept 1: Methods of table setting.

Objective 1: Application of table setting methods.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Basic rules of table service are applicable to most types of meals. | Demonstrate table setting using flannel or magnetic board to show variations in techniques.<br>Study pictures of table settings on bulletin board.<br>View slides on table setting, "Family Enjoys Inviting Mealtime II," University of Minnesota, Ag. Ext. Service, following it with discussion of rules for serving a meal. | Test calling for identifying of the techniques of table setting and service for specific menus. |
| | **Comprehension** | |
| | Give individual reports on types of meal service used at home daily or family customs followed on special occasions.<br>Using menus in text, class decides on appropriate table settings for these menus. | |
| | **Application** | |
| A correctly served meal on an attractively set table enhances the guests' appetites. | Family groups within class plan menus to use as a basis for their demonstration of table settings and service techniques.<br>Class as a group plans and prepares a simple meal or tea serving the guests themselves. | Class evaluations of techniques demonstrated. |
| | Assume responsibility of serving dessert at home for one week. | Girls report individually on their week's duty. |

Concept 2: Techniques of simple meal service.

Objective 2: Employment of techniques of simple table service.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Table service includes the method by which food is served and the equipment needed to do the serving. | References on different types of table service.<br>Slides. "Table Modes and Manners," University of Minnesota, Ag. Ext. | |
| | **Comprehension** | |
| | Discussion of reading.<br>Discussion of the film.<br>Students cite examples of the community influence on the type of table service practice. | |
| | **Application** | |
| The type of table service that is chosen depends upon the food selected, the occasion, the family, and the environment. | Role-play: host, hostess, guest. Practice serving according to the various types of meal service. | Observation of students. |
| | Assist with serving of the family meals. | Report to class on type of service used and how it was carried out. |
| | **Analysis** | |
| The choice of table service for the particular occasion may lead to ease in serving and enjoyment of the meal. | Plan simple party for class: carry out the type of table service appropriate. | Observation of student. Class members analyze the party according to the principles learned. |

Concept 3: Rules of table etiquette.

Objective 3: Application of rules of table etiquette.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Etiquette refers to the conventional rules observed in society. | View film, "Table Manners," University of Minnesota.<br>Read about manners with reference to specific foods eaten.<br>Make a list of "finger foods." | |
| | **Comprehension** | |
| Social custom has set definite rules to follow when eating a meal. | Discuss your part in making the school cafeteria a pleasant place to eat.<br>Discuss the logic involved in the rules on good manners.<br>Discuss relationship of family meal-time to family happiness and how good manners mean basically *thoughtfulness* of others at the table. | Test that asks girls to decide on correct manners to use in specific situations.<br>Evaluate one's own manners at table especially at home. |
| | **Application** | |
| Following the procedures of etiquette may result in better relationships with others. | Girls demonstrate simple table etiquette, such as:<br>Use of knife and fork<br>Use of soup spoon and teaspoon<br>Buttering of bread<br>Use of napkin<br>Posture<br>Conversation<br>Personality of hostess<br>Plan topics of conversation suitable for use at the table.<br>Discuss poor table topics.<br>Dramatize good manners in public eating places, especially the after-school gathering places.<br>Discuss how good table manners contribute to social confidence. | Girls evaluate improvement in their own manners after a three-week period.<br>Girls report in class instances they have observed of poor manners being practiced. No names! Tell how they could be improved. |

II. Major Concept: Factors influencing food preparation.

Broad Objective II: Perception of factors which influence the preparation of food in the home.

Broad Generalization: Special techniques and procedures affect the preparation of food.

Concept A: Management of resources in food preparation.

Objective A: Identification of the effect of the management of resources on food preparation.

Generalization: Planned activities may serve as the means which make learning possible.

Concept 1: Cleanliness in food preparation.

Objective 1: Application of sanitary practices in food preparation.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Personal cleanliness and sanitary procedures make it more pleasant for people to work together. | Read references on grooming, aprons, and practices for the kitchen.<br>Make a list of suggestions for personal cleanliness and sanitary practices in the laboratory which make it more pleasant for people to work together. | List suggestions for cleanliness. |
| Cleanliness of the worker and cleanliness of all food and | Demonstrate the sanitary handling of tableware. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| equipment are basic to good work habits. | Demonstrate preparing a vegetable relish. | |
| Microorganisms may be spread by direct and indirect contact. | | |
| | **Comprehension** | |
| | Students write slogans on cleanliness. | |
| Dishes scalded with boiling water are more sanitary than those wiped with a towel. | Student demonstrations on dishwashing, cleaning stove, refrigerator, sink, and counters. | Demonstrations. |
| | **Application** | |
| Cleanliness in the kitchen promotes good health. | Students develop a cleanliness code which promotes good health. | Cleanliness code. |
| Microorganisms responsible for disease and decay are widely distributed. | Demonstrate gelatin cultures of soiled hands, hair, dishwater, and soiled tea towel. | |

### Concept 2: Safety in the kitchen.

### Objective 2: Identification of safety practices for working in the kitchen.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge — Comprehension** | |
| Safety practices make the kitchen a less dangerous place to work. | Read references on safety in the kitchen. Write jingles on safety.<br>Film — "Cooking: Kitchen Safety," McGraw-Hill, University of Minnesota.<br>Demonstrate: | |
| Accidents are prevented by adequate information and consistent practice. | 1. Use of paring knife and cutting board.<br>2. Can opener.<br>3. Removing covers from hot pans.<br>4. Storing knives. | |
| Special techniques are involved in food products that produce steam. | 5. Operation of gas and electric ranges.<br>6. Care of wastebasket.<br>Demonstrate safe clothing to wear in the kitchen. | |
| Awareness of possible kitchen hazards, such as extended handles, sharp edges, and hot surfaces on burners is basic to safe work habits. | Arrange a bulletin board on Do's and Don'ts.<br>Display cartoons from National Safety Council. | |
| Fatigue is a common cause of accidents. | | |
| | **Application** | |
| The number of home accidents can be reduced if family members carry out safe practices. | Role-play good and poor safety habits. | Role-play situations. |
| | **Analysis** | |
| Combustion may be prevented by protecting the combustible substance from oxygen. | Determine the various uses for fire blanket, fire extinguisher, soda. | |

### Concept 3: Techniques of group laboratory work.

### Objective 3: Perception of techniques used in foods laboratory group work.

### Concept a: Planning time schedules.

### Objective a: Development of a time plan for best utilization of the class period in a laboratory situation.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| To plan one's work is to decide what needs to be done and when to do it. | Students list times in life where it might be necessary to make plans ahead — to be alerted to thinking ahead. | Analyze lists to see how much they really know about time planning. |
| | **Comprehension** | |
| | Students list jobs to be done in the preparation of a simple food or meal, with teacher guidance, so they can see how many separate jobs there are to do. | |
| Following systematic plans for laboratory work saves time and confusion during the period. | When planning a meal, students might prepare the molded salad a day in advance of need. Discuss to see value to the homemaker. | Note the values of the students as they list the time-saving to the homemaker. |
| | List those jobs that are different in the laboratory situation from the home situation to think through the transfers necessary. | Short paper on "What is Time" or "What Can I Do With Time." |
| | Demonstrate ways of cutting down trips. Have students in buzz groups suggest how this would save time to help them comprehend the concept of time management. Students could then suggest other ways to save time. | Note attitude of students on time saving. Also ability of student to see ways of saving time. |
| | Students make list of things for which they think they should be responsible in a group situation in food preparation. | |
| | List routine housekeeping duties and why they are important. | |
| | Decide what should be done to satisfactorily take care of each housekeeping duty. | |
| | **Application** | |
| In the foods laboratory group acceptance involves a standard of work to be practiced by each individual in the class. Following systematic plans for laboratory work saves time and confusion during the class period. | Students make plans for preparation of simple meals and carry them out to develop ability to apply time plans to their needs. | Evaluate time plans and check on how students carry them out. Students might evaluate ability to plan the schedule and follow it. |
| | Students may be asked to follow someone else's time plan to give them opportunity to see the needs of the next step. | |
| | **Analysis** | |
| A well-planned day may give the homemaker more time for herself and her family. | Use time and motion study on preparation of a simple food. | Note discussion. |
| | Discuss to see what improvements could have been made. Student then makes a time plan and prepares the food again. Laboratory groups observe each other during preparation. Then evaluate habits evidenced for ways to improve and for good points observed. | Students might list places to improve individual work.<br>Short paragraph on "How I would have done this had I been in Sue's shoes."<br>Check sheet might be used for habits. |
| | Analyze own time plan to see where the individual could save time. | Check analysis. |
| | Students follow various schedules for the same type of work. Compare to see the differences and advantages and disadvantages of each. | Pencil and paper test on time schedules. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Synthesis** | |
| | To summarize, the students draw together a set of helps for saving time. | Teacher evaluation of the listed helps. |
| | Students might draw together suggestions for improvement of the school laboratory. | Suggestion might serve as a good evaluation device. |
| | To help students transfer their learning they might work with their mothers to arrange home kitchen more efficiently. | Report on home experiences. |
| | Plan and devise a check list for readiness to work in the kitchen. | |

### Concept b: Cooperation in the kitchen.

### Objective b: Identification of devices and procedures for cooperation in the laboratory.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Cooperation in the kitchen aids in carrying out group plans. | Read and discuss to find out what we mean by cooperation. | Make a sociogram. Have students rank their class, without names, on a social ladder with x's. This will give insight to the class structure. |
| | Skit to demonstrate problems that might arise in a kitchen where cooperation is missing. | |
| | List reasons for cooperation to see how the students might be affected. | |
| | **Comprehension** | |
| | Work in buzz sessions to list ways in which good working relationships with others may be established. Report to class to form simple generalizations. Give examples to help establish concepts more clearly to students. | Check attitudes of the class.<br>Check to see how class members are working together.<br>Check generalizations. |
| | Students give examples to differentiate between cooperation and failure to do one's share. | Keep close watch on students to see if they are following. |
| | **Application** | |
| Learning to work and plan cooperatively is accomplished to its fullest extent when one is able to work and plan with all abilities and types of class and family members. | Role-play family scenes to show cooperation in meal preparation. | Teacher analyze role-play. |
| | Cooperatively develop a checklist to evaluate relationships in working with others in the laboratory situation. | |
| | Plan and carry through laboratory and home experiences in which opportunities are provided for working together in various group combinations. | Use checklists in laboratory. Have students fill it out; teacher do the same. Compare. |
| | Have swap day to change partners. Work in small and large groups to give experiences in various situations. | Notice reaction to new partners. Check to see if further educational experiences are necessary. |
| | **Analysis** | |
| Understanding and fulfilling one's responsibilities in the kitchen will contribute to personal and social satisfactions. | Rotate managerial responsibilities and other roles to be carried out to learn of various activities in the family. | |
| | Students accept responsibilities in the home kitchen to help the mother and to further develop the student's ability to work cooperatively with others. | May have projection type exercise to check progress. |

### Concept 4: Effective use of equipment in relation to food preparation.

**Objective 4: Principles involved in the use of kitchen equipment.**

**Concept a: Small equipment.**

**Objective a: Analysis of procedures in the use of small equipment.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge and Comprehension** | |
| Small equipment used in the kitchen includes knives, spatulas, beaters, mixing spoons, measuring cups and spoons. | Read about small equipment. | Report. |
| | Interview mothers on favorite equipment. | |
| | Display pieces to be used. | |
| | Discuss uses of different pieces of equipment. | |
| | Prepare a tack board on Then and Now. | |
| | Demonstrate use of paring knife, can opener, peeler, knife with cutting board, and grater for correct usage, safety practices, proper storage and care. | |
| | **Application** | |
| Practice develops skill in the use of small tools. | Determine tool and use for appropriate functions at school and at home. | Report. |
| | Develop a check list on the use of equipment. | |
| | Record pieces of equipment used at home for one week. | Report. |
| | **Analysis** | |
| Proper selection and correct use of equipment may contribute to efficiency. | Summarize; identify tools which were used most and the skills being developed. | |
| | Discuss results of experiments. | |
| Correct procedures must be practiced when using tools to insure safety. | Students work individually or in small groups with experiments similar to the following examples showing the effect of correct equipment on food preparation. | |
| Sturdy graters with drilled holes are easier cleaned than with punched holes. | *Paring knives*<br>Pare a vegetable with different knives observing efficiency in use and ease of handling. | |
| Care prolongs life of a device and assures better cooking results. | *Knives for chopping*<br>Chop vegetables with a paring knife. Chop an equal amount of vegetable to same degree of fineness with a French Cook Knife. Compare time required and ease of doing job. | |
| | *Grater and shredder*<br>Grater with punched holes<br>Shredder with drilled holes<br>Grate or shred a carrot on each.<br>Note time required, compare product and ease of doing job, and ease of cleaning shredder. | |
| | *Can opener*<br>Can openers of various types. Remove bottoms from empty tin cans. Note ease of use, whether one or two hands are required to operate. What happens to lid? Smoothness of rim of can. | |

**Concept b: Cooking utensils**

**Objective b: Perception of the factors involved in the selection, use, and care of cooking utensils.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| A good cooking utensil is designed and constructed to make the best use of the heat provided. | Students examine different cooking utensils in the department. |  |
| Specific materials in utensils require a specific type of care. | Study references for the care of the various utensils. |  |
|  | **Comprehension** |  |
| Materials used in kitchen equipment include: aluminum, copper, cast iron, stainless steel, glass, and enamelware. | Discuss the various utensils for best transfer of heat.<br>Predict the results for pans of different sizes in relation to 6 or 8 inch surface units. | Discussion. |
|  | **Application** |  |
| The choice of utensil affects the end product. | Using pans of the same metal or material, of the same capacity but of different design — one to have straight sides and flat bottom; one to have slanted or very curved sides but flat bottom — bring water to the boiling point. Observe time involved. Use HI setting on the electric range, so the unit's glow is discernible; use full flame on the gas burner. |  |
| Metals and materials used in manufacturing cooking utensils differ in speed and evenness of heat diffusion. | Choose utensils of the same material or metal but of different sizes. One to fit the 6 inch unit or burner one to overhang by more than one inch on both sides. One utensil to fit the 8 inch unit; one to be 2 inches too small. Select 6 inch and 8 inch units providing equal amounts of heat respectively. Bring equal amounts of water to the boiling point. Observe the time involved. Use the HI setting on the electric range and full flame on the gas range. Observe any waste of heat. Select utensils compatible to surface unit or burner cookery of same capacity of the following materials: pyroceram, copper-clad stainless steel, stainless steel, aluminum-clad stainless steel, medium-weight aluminum, magnalite, light-weight aluminum, and duranil. Use a temperature controlled surface unit and burner, if possible. Use equal amounts of water in each utensil and use a temperature setting of 200 degrees. Use accurate candy thermometers. Use stop watches. Observe time necessary to bring water in the center of the pan to a rolling boil. | Chart results. |
|  | **Analysis** |  |
| When one selects utensils correctly sized and shaped for surface cooking and made of metals appropriate to the cooking procedure and unit or burner used, the most economical utilization of heat will result and cooking outcomes will be predictable. | Study results and determine causes for the difference in timing of previous experiment. | List causes or write paragraph on reasons for the difference in timing. |
|  | **Synthesis** |  |
|  | Group utensils according to design and efficiency of heat transfer as well as for efficient use of surface units. | Physical grouping. |
| Temperature adjustment will produce more desirable results when utensils of specific metals or materials are used for surface cooking. When utensils receive correct care, they will provide many years | Select cleaning method most appropriate to utensils used in the classroom and home kitchens.<br>Decide which utensils are appropriate for:<br>Surface cookery with water.<br>Surface cookery with dry heat or by frying.<br>Baking of cookies. | Written test. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| of good service. | Baking quick breads.<br>Baking cakes.<br>Surface cookery, noncontrolled units.<br>Surface cookery, economical and efficient utilization of heat. | |
| Properly chosen utensils properly used with tested recipes under controlled conditions will produce predictable results and make cooking and baking easier. | | |

**Concept c: Oven utensils.**

**Objective c: Perception of the factors involved in the selection and use of oven utensils.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Good browning is obtained when a utensil is made of a metal that diffuses heat evenly but does not reflect heat. | Through the use of texts, pamphlets, and bulletins, learn the property of heat diffusion of different metals and the effect of finishes on metals. | Written report. |
| | Study texts, cookbooks, and available pamphlets to learn temperature adjustments that may be made for oven cookery in utensils of varying materials. | |
| | Using texts, cookbooks, and pamphlets as resource material, discover the size of pans recommended for layer and loaf cakes, loaves of bread, and rolls. | List findings. |
| | **Comprehension** | |
| | Students list appropriate sizes of materials for preparations of different foods. | |
| | Discuss effect of different metals and finishes on food products. | |
| | Utilizing knowledge gained through reading, predict baking temperatures for cake baked in a dulled aluminum and in a pyrex cake pan. | |
| | **Application** | |
| The size and shape of baking pans affect the volume of foods such as loaf and layer cakes, bread and rolls. | Prepare convenience cookies using cookie sheets made of: dull aluminum, shiny aluminum, darkened tin, and stainless steel. Sheets should be of similar size and shape or used in a manner to compensate for differences. | Chart results |
| | Same temperature setting should be used and same oven placement unless a specific range has peculiar requirements. | |
| | Same baking time for all. | |
| | Prepare convenience quick bread using pans of different sizes and shapes but of same baking temperature and time, same oven placement. | |
| | Prepare convenience cake using a dulled aluminum cake pan and two Pyrex pans of the same size. For the aluminum pan and for one Pyrex pan, use the same baking temperature, time, and oven placement. For the other Pyrex pan use the same baking time and oven placement, but adjust the baking temperature by decreasing 25 degrees. | |
| | **Analysis** | |
| | Observe results of above experiments. Discuss. Correlate results with procedures. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Adjustment of temperature and timing appropriate to utensil used will produce predictably desirable results. | **Synthesis**<br>Decide oven temperatures compatible to the utensils chosen. Decide which cookie sheets are most appropriate for class and home use.<br>Group classroom baking utensils according to appropriateness to various food preparations. | |
| When one chooses proper baking pans, follows tested recipes and baking procedures, and uses modern appliances uniformly, excellent results will be realized. | | |

**Concept d: Large equipment.**

**Objective d: Formulation of techniques to be followed in the use and care of large equipment.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Major appliances are designed to perform two functions: to provide motor drive or to produce heat. | **Knowledge**<br>Study construction and design of major kitchen appliances to determine the purpose of the appliance: Gas and electric ranges, gas and electric refrigerators.<br>Use texts and appliance specification sheets for information. | Quiz. |
| Use and care manuals give instruction for the correct care of major appliances.<br>Major appliances are manufactured to meet specific needs of the homemaker. | Read use and care manuals for information relative to the care of:<br>The major appliances in the classroom.<br>The new appliances in the student's home or any appliance for which a use and care manual is available or may be obtained through the factory dealer.<br>Pay particular attention to information for care of:<br>Electric surface units or gas burners<br>Chrome rings<br>Reflector pans or drip bowls<br>Oven vent<br>Drip shelf<br>Cleaning oven interiors<br>Oven calrod units or comparable gas burners<br>Door removal<br>Glass oven doors or glass inserts<br>Automatic meat probe<br>Oven racks<br>Rotisserie motors<br>Temperature control dial<br>Replacement of light bulbs<br>Hood fans — absorptive or vented<br>Use of foil — oven, surface units, and burner bowls | |
| | **Comprehension**<br>Summarize material read and apply to specific range either at home, in classroom, or one chosen for study.<br>Select methods of care appropriate to:<br>1. Home use of major appliances<br>2. Classroom use of major appliances | Oral or written report.<br>List appropriate measures.<br>List measures to avoid. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | 3. Geographic location | |
| | 4. Selection of care practices plus reasons for observing certain practices. | |
| | Restate in own words correct information for: | |
| | Recommended temperatures for storage of specific foods | **Ability to formulate generalizations.** |
| | Safe storage periods for specific foods | |
| | Specific areas — dry cold areas, moist cold areas for storage of specific foods | |
| | How and why of refrigerator temperature adjustment | |
| | **Application** | |
| | Apply care methods suggested for specific features of particular model of range and refrigerator. | **Student demonstration.** |
| | Insert thermometers into lemons. Place lemons in specific storage areas, such as meat tender; vegetable crisper; milk, butter, and egg keepers; freezer. Vary temperature control settings. | **Chart findings.** |
| | Keep record of each thermometer at each temperature setting. Record number of times door opens. | |
| | Students have laboratory experience in the care and external finishes of appliance. | **Chart results.** |
| | Porcelain<br>Detergent and water<br>Appliance wax and cleaner | |
| | Stainless Steel<br>Baby oil<br>Vinegar and water<br>Stainless steel cleansers rubbed with the grain<br>3 tbs. baking soda to 1 pt. water. Dry. | |
| | Chrome<br>Chrome cleaners<br>Glass wax<br>Detergent and water<br>Silver polish<br>Bon Ami — no other cleanser | |
| | Brushed Chrome<br>2 tbs. water softener to 1 qt. water. Dry.<br>Saturate soft clean cloth with rubbing alcohol. Wipe dry. | |
| **There is a correct surface heat for every type of surface cookery.** | Compare actual use of appliance to possible use of features both at home and in the classroom. | |
| | Have students do laboratory demonstrations including: | |
| | Electric Range<br>Regular surface unit | |
| | Lowest heat setting: Place square of chocolate in paper wrapping, cut side up, directly on cold 6" unit. Select lowest heat setting. Set minute timer for 5 min. Remove from range. Use rubber spatula to scrape into pan. | |
| | Place 3 T. butter in aluminum measuring cup. Place directly on cold 6" unit. Select lowest heat setting. Set timer for 30 min. Observe. | |

| **CONTENT** | EDUCATIONAL EXPERIENCES | **IDEAS FOR EVALUATION** |
|---|---|---|
|  | Gas Range<br>Place a square of chocolate in a small pan. Place on burner and select lowest flame setting. Observe in 5 min. Remove from heat.<br>Place 3 T. butter in an aluminum measuring cup. Place on burner on simmer or lowest flame. Observe in 30 min. Remove from burner. |  |
| **Temperature controlled units and burners provide very even heat.** | Bake an upside-down cake in a 10" aluminum covered frypan. Line bottom of frypan with three layers of wax paper.<br>Melt shortening and brown sugar in the frypan at 225 degrees. Arrange fruit in bottom of pan. Add the contents of a yellow cake mix prepared according to directions. Cover pan. Increase heat setting to 275 degrees. Set timer for 25 min. Remove lid from frypan. Cook 5 min. longer without lid. Remove from heat. Cook 5 min. Remove from pan. |  |
| **Properly used, modern ovens give excellent, uniform results.** | Prepare convenience cookies according to package directions. Use both gas and electric ovens. Choose identical oven temperatures, baking time and cookie sheets. If a single sheet is baked in each oven, place the rack so that product will be centered in the oven. If two sheets are baked, arrange racks so oven will be divided into thirds. Use cookie sheets of correct size so a margin of 2" will separate cookie sheet from oven wall. Place cookie sheets in one electric and one gas oven in this way. In the other, arrange sheets so one side of cookie sheet will have less than 1" space between sheet and oven wall. |  |
| **Broiling results vary with the type of broiling procedure.** | Use "push-button" cheese on crackers. Arrange crackers completely across broiler pan, filling completely. Place broiler pan according to specific range directions. Record degree and evenness of browning and time involved. | **Chart results.** |
|  | or |  |
|  | Arrange slices of white bread completely filling broiler pan. Toast under the broiler according to instructions for specific range. Observe for degree and evenness of browning. | **Chart results.** |
|  | Analysis |  |
| **Correctly used modern ranges will efficiently perform any desired cooking task.** | Compare results of broiler and other experiment. Relate to type of range used, and type of broiling employed. Discuss why it is important to start with cold units or burners. | **Discuss or report.** |
|  | Discuss temperature findings for specific refrigerator storage areas relative to control dial selection against correct temperature for specific area. |  |
|  | Report temperature selections relative to safety. |  |
|  | Compare care techniques reported by various class members. | **Discussion.** |
|  | Synthesis |  |
| **Major appliances, properly used, enable one to be more creative, efficient and eco-** | Select care procedures to be accepted as good procedure for:<br>1. Home use of appliance | **Quiz.** |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| nomical. | 2. Classroom use of appliance | |
| With correct care, major appliances provide many safe, carefree hours of efficient and economical operation. | Decide upon care techniques to become a daily habit in the use of major appliances.<br>Formulate generalizations about the care of appliances and correct placement of utensils. | |
| | Predict how the use of the low heat settings can be helpful in the preparation of foods. | Observe if students apply knowledge in food preparation. |
| | Select method producing truest broiling results. Select quickest broiling.<br>Decide on ways broiling might be utilized in food preparation. Decide how the broiler could aid in preparation of creative dishes. | |

**Concept B: Factors influencing the use of recipes.**

**Objective B: Identification of the factors which influence the use of recipes.**

**Generalization: Better results are obtained when one is familiar with the terms used in the recipes and the reasons for the methods given in the directions.**

**Concept 1: Cooking terminology.**

**Objective 1: Application of cookery terms used in recipes.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Factors that contribute to success in cooking are: understanding of cooking terms, tested recipes, measured ingredients, and temperatures. | Study cookbooks and magazines for cooking terms used.<br>List common cookery terms.<br>Film: "Common Cooking Terms and What They Mean," McGraw-Hill.<br>List information a good recipe gives.<br>Teacher demonstrations on: "Measuring, mixing, stirring, creaming, beating, cutting in." | |
| | **Comprehension** | |
| Terms used in recipes include: leavening agent, thickening agent, dry ingredients, shortening, batter dough, broil, baste, bake, fry, grate, garnish. | Discuss the meaning of terms used in recipes.<br>Discuss the value of a recipe. | Discussion. |
| | Discuss the film and definitions of terms used.<br>Discuss special cooking information. | Quiz on terminology. |
| Ingredients are mixed as indicated in the recipe. | Discuss the information a good recipe should give a cook.<br>Use recipes from cookbooks and magazines to discuss the order in which the ingredients are combined, the method of combining them, and cooking instructions.<br>Discuss recommended oven temperatures. | |
| | **Application** | |
| An understanding of cookery terms and abbreviations used in recipes contributes to a more effective use of the recipe. | Pantomine the way you would follow a given recipe.<br>Student demonstration or laboratory on procedures such as: "Measuring, mixing, stirring, creaming, beating, cutting in." | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| A tested recipe and standard measuring utensils have an effect upon the finished product. | Arrange bulletin board showing various techniques in food preparation.<br>Collect favorite basic recipes for card file for future use. | *Observation.* |

## Concept 2: Basic techniques of measuring.

## Objective 2: Application of basic techniques of measuring.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge**<br>Study references on measuring various ingredients and the importance of accurate measurements.<br>View charts showing methods of measuring.<br>Films:<br>McGraw-Hill<br>"Measuring Accurately"<br>"Measuring in Cooking"<br>"Cooking and Measuring" |  |
| Measurement techniques for various ingredients include volume, liquid, and unit measures. | Teacher demonstrates measuring of liquid, fat, and dry ingredients and compares amounts of ingredients measured using standard equipment with that measured by other means such as:<br>Teacup vs. measuring cup<br>Teaspoon vs. measuring spoon |  |
| The table of measurements is a guide to be used when changing from one type of measurement to the other. | Students list names of common measuring devices used in kitchens.<br>Study table of measurements and abbreviations. Study and learn food equivalent: 1 lb. cheese = 4 c. grated. |  |
|  | **Comprehension**<br>Discuss methods used in measuring basic ingredients such as: flour, sugar, baking powder, soda, salt, spices, shortening, liquids, and syrups. | Discussion and quiz on methods of measures. |
|  | Discuss films on measurement techniques.<br>Students discuss and practice measuring fat, liquid, and dry ingredients. |  |
|  | Discuss what might happen if measurements are not accurate or amounts are not followed. Give examples from personal experience. | Test on table of measurements. |
| The accuracy with which one measures the ingredients has an effect on the success of the finished product. | **Application**<br>Students arrange a display of pictures or actual articles of equipment used in the measurement of ingredients. Label each piece of equipment. | Quiz on names and uses of each piece. |
|  | Students demonstrate the use of equipment for measuring flour, brown sugar, liquids, fats, oils, syrups, and baking powder. |  |

## Concept C: Principles of preparing foods for simple meals.

## Objective C: Integration of the principles of preparing foods for simple meals.

**Generalization:** Efficient meal preparation is influenced by careful adherence to the basic principles of food preparation.

## Concept 1: Preparation of easy to prepare milk and fruit beverages.

## Objective 1: Application of principles in the preparation of beverages.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Milk and fruit beverages are applicable for most types of meals. | List favorite beverages.<br>Make a list of cold and hot beverages from references. | |
| Milk is an excellent source of many nutrients, including protein and calcium which are essential for growth. | Study nutritive value of these beverages.<br>"Testing Laboratory" to illustrate different beverages. | |
| | **Comprehension** | |
| Citrus fruit beverages supply the daily need for Vitaman C which is not found in milk. | Discuss the beverages from the developed list as to their nutritive value.<br>Report to class on one's snack and mealtime beverage choices.<br>Discuss their nutritive value. | Class discussion. |
| The types of milk on the market include: fresh whole, skim, low-fat, homogenized, evaporated, condensed, and dried. | Discuss the forms in which these food products may be purchased.<br>Discuss steps to be followed in the preparation of the recipe chosen and the standards for the product. | |
| | **Application** | |
| Casein in milk coagulates when heated to high temperatures for a long period of time. | Plan simple menus which include beverages from the developed list.<br>Prepare a cold milk or fruit drink to serve with toast strips or cookie mix. | Evaluation of menus developed. |
| Use of certain techniques prevents scum formation during the heating of milk. | Prepare cocoa using the different types of milk. Calculate the cost per serving.<br>Prepare a hot milk beverage such as cocoa or hot chocolate.<br>Discuss the effect of milk and other liquids on the diet.<br>Prepare a bulletin board with pictures illustrating milk and fruit beverages. | |

## Concept 2: Preparation of fruits and raw vegetables.

## Objective 2: Application of the principles involved in preparing fruits and vegetables.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Fruits and vegetables are included in the diet because of their cellulose content and nutritive value. | Study contribution of fruits and vegetables to the diet.<br>Study qualities to look for in selecting fruits and vegetables. | |
| Raw foods usually contain more nutrients as cooking processes tend to destroy certain nutrients. | Demonstrate preparation of vegetable relishes, raw fruit plates, simple salads, and fruit cups. | |
| Some vitamins are lost when time is needed for chilling and blending of flavors. | Study simple menus to determine the kinds of fresh fruits and vegetables utilized. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Comprehension** | |
| | Discuss demonstrations and summarize key points in a paragraph. | Paragraph. |
| | Discuss fruits and vegetables which could be incorporated into snacks and the role they would have in a good diet. | |
| | Discuss the use of a Vitamin C additive to prevent discoloration of fruit. | |
| Quality fruits and vegetables are bright in color, and free from blemishes. | Discuss standards for fresh fruits and vegetables. | |
| | Write a short report on the important qualities. | Report. |
| | **Application** | |
| Principles incorporated in the preparation of fruits and vegetables provide a framework for procedures to follow. | Prepare fruit or vegetable snacks for after school or after game parties as a home project. | |
| | Plan and serve a simple meal using raw vegetables and fruits. | Laboratory work. |
| Some vitamins are destroyed by exposure to air and light. Fruit cooked with sugar syrup has a tendency to remain whole while that cooked in water will soften or break down. | Prepare cooked fruits in various ways and incorporate in meal patterns. Compare fruit cooked in syrup with that cooked in water. | |

## Concept 3: Preparation of toast and quick bread mixes.

## Objective 3: Employment of the principles involved in the preparation of breadstuffs.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Simple toppings can be added to plain toast. | Study the procedures and various ways of preparing toast as well as standards for toast and quick bread products. | |
| Quick breads include muffins, baking powder biscuits, waffles, pancakes, loaf breads. | Define quick breads. | |
| | Read directions on the packages of various quick bread mixes. | |
| | View film: "The Art of Making Muffins," General Mills. | |
| Quick breads use a leavening agent such as baking powder to raise and lighten the batter. | Demonstrate the making of toast using the broiler. | |
| | Demonstrate the mixing of muffins from a package mix. | |
| | **Comprehension** | |
| Mixes are used to save time in meal preparation. | Discussion of demonstrations and film. | |
| | Discuss the characterictics of a standard product. | |
| | Discuss the general rules to follow when baking in an oven. | |
| | **Application** | |
| The method of combining ingredients affects the texture of the product. | Prepare toast and quick bread mixes as part of the meal pattern. Score products. | Evaluation of products. |

**Concept 4: Simple dessert cookery.**

**Objective 4: Employment of the principles incorporated in the preparation of easy to prepare desserts.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Easy to prepare desserts include cookie mixes, cereal candy, jello, and cake mixes. | Demonstrations:<br>Preparation of jello, cereal candy, puddings, cookies. | |
| Desserts have nutritive value and contribute to the enjoyment of family meals. | View slides: "Cooky Wise," General Mills, Ag. Ext. or filmstrip, "The Art of Making Cookies," General Mills.<br>Explore cookbooks to find recipes for easy to prepare desserts.<br>Prepare a bulletin board on "Dessert Magic" featuring easy to prepare desserts.<br>View filmstrip, "Designing Desserts," General Mills, on ways to prepare and serve gelatin desserts and pudding mixes.<br>Study references on the making of jello and baking of cakes and cookies. | |
| | **Comprehension** | |
| A standard product has characteristics of an established model. | Discuss reading, recipes found, and visual presentations.<br>Discuss what is meant by a standard product.<br>Discuss score cards used for evaluating products.<br>Discuss ways of keeping the desserts that have been prepared. | Contributions made to class discussion. |
| | **Application** | |
| Skill in making desserts is acquired through practice. | Prepare a simple dessert for your family. Score using a standard score card. | Evaluate product. |
| Making a satisfactory product requires following an exact procedure. | | |
| Ice speeds chilling of jello desserts. | Prepare a gelatin dessert using ice cubes as part of the liquid. | |
| Each gelatin layer needs to set before adding the next layer. | Make layers with gelatin dessert. | |
| Gelatin may be whipped to egg white consistency. | Prepare whipped gelatin. | |
| A firm gelatin may be cut into cubes. | Prepare gelatin dessert by cubing the firm gelatin. | |

**Concept 5: Techniques of egg and simple meat cookery.**

**Objective 5: Employment of principles of protein cookery.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge — Comprehension** | |
| | Read text and bulletins on egg cookery and meat cookery. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | Filmstrip: "How To Cook Eggs," Audio Visual, Ag. Ext., University of Minnesota. |  |
|  | Arrange a bulletin board with attractive egg dishes. |  |
| Proteins are tender when cooked at a low temperature.<br>Dry heat is used for tender meats. | Demonstrate preparation of eggs in various ways such as poaching, soft cooked and hard cooked in the shell, fried, pan broiled, and oven broiled bacon and ground beef. |  |
|  | **Application** |  |
| The protein of eggs coagulates when heated. | Score the egg dishes which were prepared as part of a meal pattern. |  |
| Cooking proteins at high temperature makes them tough and rubbery. | Prepare eggs by one of the methods demonstrated at home. Discuss with mother. Apply score card to your product with special emphasis on the egg cookery principle. | Report. |
| Toughness and shrinkage of the protein results with high temperatures. | Score bacon which was prepared as part of a meal pattern. | Evaluate. |
|  | Discuss. |  |
| Draining the bacon fat as bacon cooks and blotting with absorbent paper gives a less greasy product. | Incorporate the principles of protein cookery to simple meats for a bulletin board. |  |
| Grinding makes less tender meat more tender by cutting the connective tissues. | Broil ground beef patties as part of meal at school. Score. |  |
|  | Prepare a simple meat at home. Report. |  |

## GRADE 8

## CREATIVE FOODS

**Introductory Statement**

By studying aesthetic aspects of foods, eighth grade students will become aware of what makes food interesting and pleasurable rather than just a biological need. With an awareness of the possible enjoyment, they will like to plan and prepare meals at home and at school. Aesthetic study will provide a basis for deeper appreciations of foods in which students will experience a greater reward for increased understanding of values different from their own as well as an appreciation of the sociability aspects of food.

Enjoying food preparation at home could improve family relationships. Family members might share the pleasures of well-prepared meals thus contributing to a happier relationship at mealtime. With increased satisfaction during planning and preparation, healthy food habits will be developed and shared participation will promote better family associations.

Eighth grade students are eager and exuberant, like to participate in discussion, and like to work in groups. Since work habits acquired at this age usually follow throughout their life, it is important to provide opportunities for development of good work habits. They need to feel important so meal preparation will help them gain a sense of accomplishment and security.

**Unit Objectives:**

I. Recognition of the effects of socio-economic and cultural changes on food habits
   - A. Application of the influence of socio-economic and cultural changes on eating patterns
   - B. Perception of the relationship of the balance of intake of nutrients to health
   - C. Identification of the influences of marketing facilities on patterns of diets

II. Formulation of an effective meal plan for the management of resources
   - A. Discovery of the effects of creativeness on planned menus
   - B. Formulation of a plan of work for meal preparation
   - C. Integration of the principles involved in preparing foods for moderate meals

I. Major Concept: Effect of social change on the diet.

Broad Objective I: Recognition of the effects of socio-economic and cultural changes on food habits.

Broad Generalization: Social, economic, and cultural changes will influence food habits of individuals.

Concept A: Change in eating patterns.

Objective A: Application of the influence of socio-economic and cultural change on eating patterns.

Generalization: Eating patterns will be influenced by social, economic, and cultural changes.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Social changes affecting food habits include: less supervision, change of eating patterns, more money to spend. | Use problem of two families for class discussion. One family has preschool children and mother is at home most of the time. The other family's mother works as a waitress from 4:00-9:00 p.m. The daughter in this family makes supper for herself and her brother. | Student participation. |
| | On board list differences you might find in diet of the two girls involved. Diet dependent on teen-agers' choice. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Comprehension**<br>Discuss possible advantages and disadvantages of both situations.<br>Discuss further situations where the quality of the diet is dependent on teen-agers' choice. | |
| Food habits, like other behavior patterns, are subject to deliberate modification by those who are motivated to change and act accordingly but are highly resistant to direct attempts to change. | Class view a picture of a family of 50 years ago eating together. Discussion of how student's families differ from this picture. How are their families like this picture? Discussion of how these changes affect eating patterns.<br>Students ask parents about changes in eating patterns from the time they were teen-agers to the present and list these changes.<br>What are the advantages and disadvantages the student has gained in his family?<br>Have students keep a record of income and spending for one week. Figure amount spent on foods.<br>National average.<br>Discuss how findings affect students' diets. | Contribution to discussion. |
| Food habits of individuals change as a result of indirect influences, such as changes in supply resulting from advances in production, technology, and distribution; economic resources; and the educational, social, and cultural environment. | **Application**<br>Use analogies such as:<br>Men buy Cadillacs because ——.<br>Girls buy shifts because ——.<br>Girls back comb their hair because ——.<br>Girls don't eat lunch because ——.<br>Discuss reasons for conforming in the situations above and compare these reasons to the desire not to eat lunch or breakfast. | |
| Social changes affect teen-agers' diets. | Students write a short paper describing how their own spending affects their diet.<br>Students write paragraphs telling ways they or other girls conform in food they eat and how this affects diet. | Evaluate paper written. |

**Concept B: Importance of nutrient balance to health.**

**Objective B: Perception of the relationship of balance of intake of nutrients to health.**

**Generalization: The balance of intake of nutrients will affect health.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| A balanced diet is one that provides us with our total caloric intake and nutritional needs for the day.<br>All nutrients are used by the body to build and maintain tissues and to regulate body processes. | **Knowledge**<br>Using references, study the amounts of food needed daily by the student and what determines the need.<br>View film: "Your Food," and "Foods That Build Good Health," University of Minnesota.<br>Study nutrient charts. | |
| The food nutrients include: | **Comprehension**<br>Discuss film and reading of references. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| vitamins, minerals, protein, fats, and carbohydrates. | List food nutrients. Give examples of foods for each. | |
| | Keep a record of food eaten for one day and figure calories. | Discussion of food records. |
| | Review Basic 4 to check record of food eaten for a day for nutrient content. | |
| | **Application** | |
| Nutritional needs of individual family members vary. Adequate nutrition can be obtained with many combinations of food commonly available throughout the world. | Take a survey of class to find nutrients that were missing in large percentage of diets.<br>Have class make suggestions about why students don't eat these foods. | |
| | **Analysis** | |
| Adequate nutrition is promoted by establishing good food habits and good attitudes toward food. | Analyze present food habits and determine what is lacking in the diet or what foods are included that may not meet requirements and decide on causes, such as food dislikes, prejudices, availability of foods, and food fads. | |
| | Make suggestions for foods that may be included that would contain the required nutrients. | Suggestions to be incorporated. |
| | **Synthesis** | |
| Foods which supply the types and amounts of nutrients that are similar to body composition are more effectively utilized by the body. | Make suggestions of foods that could be included that would contain nutrients needed. | |
| | Write a menu for one day including the nutrients based on the Basic 4. | Discuss. |

Concept C: Influence of marketing facilities.

Objective C: Identification of the influences of marketing facilities on patterns of diets.

Generalization: Marketing facilities promote changes in patterns of consumption.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Food markets are innumerable in size and variety. | Read references on types of markets and how they developed.<br>Take a look at types in community. | |
| | **Comprehension** | |
| Consumers' choices are a determinant of marketing practices, prices, and the qualities of foods in the market. | Visit many kinds of markets in the community and report characteristics and services. List groups of merchandise and services found in each market. | Oral reports on community markets.<br>Contribution to discussion. |
| | **Application** | |
| Different types of stores and marketing services have developed to meet individual needs.<br>As more services are built into foods, the control of industry over the kinds and quality of food increases and that of the home decreases. | From visits and reports of markets in the community compare:<br>Their service<br>Their storage and display<br>The quantity of merchandise<br>The quality of merchandise<br>Their assortments<br>Their arrangements<br>Their variations | Written comparison. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Rational choices become more difficult as the number of food products and ways of merchandizing them increases. | Their helpers<br>The convenience of parking<br>The accessibility of store<br>Trade stamps or not | |
| The method of marketing and marketing services that one selects will be determined by the consumer's time, money, means of transportation and standards. | **Analysis**<br>Analyze one market, show how it meets the needs of saving, time, and standards. | |

**II. Major Concept: Management of resources in food preparation.**

**Broad Objective II: Formulation of an effective meal plan for management of resources.**

**Broad Generalization: Discrimination will be required in selection of foods that contribute balance of nutrients to the daily diet and fulfill requirements of food budget, family relations, and individual preferences.**

**Concept A: Relationship of creativity to menu planning.**

**Objective A: Discovery of the effects of creativeness on planned menus.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Art principles to follow in meal planning are: pleasing combinations in colors, variations in textures and form. | Read from a textbook about the psychological effects of color, texture, quality or variations in form. | Discussion. |
| The structure of a food is dependent upon the physical structure of its components. | Dye some foods an uncharacteristic color and compare the desirability of them with foods of natural color | |
| | Look at pictures of pleasing and displeasing color combinations of foods. | |
| | Look at pictures of pleasing and displeasing texture combinations of foods. | |
| | Present a bulletin board or display showing pleasing texture combinations of foods and variation in food structure. | |
| | **Comprehension** | |
| | Discuss school lunch menus of the past week deciding which offered the most attractive color combinations, variations in texture, and form. | |
| The careful choice of color combinations, texture, and form contributes to the aesthetic quality of family meals. | Compare several menus on the blackboard deciding which offer the most attractive color combinations, texture and form. | Discussion. |
| | Compare the above as a written assignment. | Evaluate comparisons made. |
| | Discuss which combinations are attractive for foods and which are not as attractive. | |
| | **Application** | |
| Well-planned meals provide pleasing combinations of food and variety in color, shape, texture, flavor, and temperature. | Plan colorful menus with variety in texture and form appropriate for your family for one day. | Evaluate menus. |
| | Plan a colorful menu with variety in texture and form for an upcoming event at school. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Sensory qualities of foods, such as flavor, texture, temperature, and appearance serve to identify foods and serve as one basis for characterizing preferences. | Plan menus appropriate for eighth grade girls for one day, applying principles of color, texture, and form. | Evaluate menus. |
|  | **Analysis** |  |
| Pleasing color variations in structure and texture have an effect on dining pleasure in the family. | Analyze the planned menus as to appropriateness of color, texture, and form. |  |
|  | Make suggestions about changes that improve the aesthetic quality of the meal. Give reasons why the change was made. | Write paper giving these changes. |

**Concept B: Effective time management.**

**Objective B: Evaluation of a plan of work for meal preparation.**

**Generalization: Performance of routine tasks according to a plan can facilitate planning, preparing, and serving food.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| Management is the organization, sorting, planning, deciding, guiding, controlling, and evaluating of energy, time, and money. | Reference on management.<br>Filmstrip, "Mealtime may be Magic," University of Minnesota.<br>Use case problem for group discussion:<br>Joan is an eighth grade girl who is slightly overweight. She is popular with her classmates. However, she is often irritable and listless in the late morning and early afternoon. She is always well groomed and attractively dressed. Her mother prepares a breakfast of tomato juice, cereal, and coffee or milk and urges her child to eat it. Joan says that she has time for only a cup of coffee and that eating breakfast makes her sick. |  |
|  | **Comprehension** |  |
|  | Discuss reference material, filmstrip, and case problem. | Discussion. |
|  | Discuss reasons for management of time, energy, and money. |  |
|  | Discuss shopping patterns. |  |
|  | Role-play: Illustrate making out a grocery list. List guides which will direct in forming a shopping pattern, can and package size, labels, store arrangement. Discuss efficiency of time and energy. View film, "Kitchen Efficiency," University of Minnesota, and answer questions based on film. |  |
|  | Discuss ideas on dove-tailing tasks and answers to questions on film. |  |
|  | Discuss distribution and rotation of tasks within units. Work on check sheet for tasks in keeping kitchen equipment in order. |  |
|  | Discuss money management of the food dollar and how this is considered in planning meals. |  |
|  | Discuss some problems the class has had in relation |  |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | to time and energy and money in planning and preparing a meal for their family. |  |
|  | List problems on chalk board. |  |
|  | Discuss possible solutions. |  |
|  | **Application** |  |
| Wise use of time, energy, and money depends on planning. | Plan a day's menu around food budget. | Day's menu. |
|  | Place and make out shopping order and plan for your family group. |  |
|  | Shop for the food. |  |
|  | Plan a work schedule for the lunch menu following time-saving and energy-saving suggestions. |  |
|  | **Analysis** |  |
| Wise use of time, energy, and money will aid in reducing frustration and will leave time for leisure. | Analyze the planned shopping pattern used; was it efficient, did it save time, and did better buying result? | Written analysis of shopping pattern and plan of work. |
|  | Analyze your plan of work. |  |
|  | Carry out the schedule plan of work for class. |  |
|  | **Synthesis** |  |
|  | Formulate a list of good shopping practices to use in organizing a shopping pattern and schedule of work which help save time, energy, and food money in your family and group family. |  |
|  | **Evaluation** |  |
|  | Evaluate your shopping pattern and schedule of work. Did it cut down on time, energy, and money over previous time? | Evaluation of shopping. |
|  | Was it easier to shop and more efficient? |  |

**Concept C: Principles of preparing foods for meals of moderate size.**

**Objective C: Integration of the principles involved in preparing foods for moderate meals.**

**Generalization:**

**Concept 1: Preparation of hot beverages.**

**Objective 1: Application of the principles involved in preparing coffee and tea.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge and Comprehension** |  |
|  | Read — preparation of coffee and tea. |  |
|  | Show and discuss a filmstrip such as one by Pan American Coffee Institute on the significance of coffee around the world. |  |
|  | Define: caffein, tannin, steep, percolate, filter, drip, volatile. |  |
| Beverages are universal as a part of a meal and between meal snacks. | Identify the use of beverages as a socializing influence around the world. |  |
|  | Discuss the care of coffee and tea pots. |  |
| Convenience forms of coffee and tea are available. | Discuss accompaniments for coffee and tea and variations in the use of coffee and tea (an opportunity for creativity). | Discussion. |
| The essential oils of coffee |  |  |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| and tea are volatile and their rate of loss is proportional to the temperature applied and the length of time the product is heated. | Demonstrate making coffee.<br>Survey to determine times of day when coffee is served. | |
| | **Application** | |
| The preparation of coffee and tea varies with the form. | Prepare coffee and/or tea for meals and guests at home for one week. Write report.<br>Prepare instant coffee and tea.<br>Coffee experiment which follows was adapted from West and Sobye, **Handbook of Food Preparation.** Macmillan, 1937.<br>Conduct experiment to compare the results of various methods of making coffee. Use same brand, proportions of coffee and water but adapt grind to method.<br>a. Make boiled coffee in enamel pot. Start with boiling water, boil 2 min., settle.<br>b. Start with cold water and bring to boiling point without further heating.<br>c. Percolate in a glass percolator. Start with hot water and percolate 5 min.<br>d. Make drip coffee and let water drip through only once.<br>Compare for color, flavor, aroma, clearness and strength.<br>Conduct experiment to compare the effects of various metals on the flavor by making boiled coffee using coffee pots of: enamel, aluminum, nickel, glass. Compare the flavor. | |
| Water, temperature, strength of beverage, agitation and cleanliness of the pot, and the material it is made from affect the qualities of coffee and tea. | Score by check list:<br>A cup of coffee<br>A cup of tea<br>Instant tea<br>Instant coffee<br>Discuss methods and effect on product obtained. | Evaluation of product. |

### Concept 2: Preparation of quick breads.

### Objective 2: Integration of the principles of the preparation of quick breads.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge and Comprehension** | |
| Quick breads include muffins and biscuits. | Read references on the making of muffins and biscuits. | |
| Leavening agents are gaseous substances which raise and lighten the batter or dough. | Define: leavening agent, knead, dough, stirring, grain, texture. | |
| | Filmstrip: "The Art of Muffin Making," General Mills. | Discuss. |
| | Demonstrate: Preparation of muffins.<br>Preparation of biscuits. | |
| | **Application** | |
| Manipulation of a flour mixture develops gluten. Gluten | Use score card on muffins; on biscuits. | |
| | Prepare muffins and biscuits for a meal at home. | Write report. Evaluate. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| is modified by the leavening gases — air, carbon dioxide, and steam. The gases are held in the gluten meshes due to its elastic quality. | Design a bulletin board for quick breads.<br>Score the biscuits; note the layers.<br>Prepare biscuits as a part of a meal pattern.<br>Score the biscuits. | Evaluation of product. |
| Fats produce their shortening effect coating flour particles and forming layers which physically separate different parts of the dough structure. Under-mixing of biscuits results in small volume and a mottled effect. Overmixing results in soggy biscuits. | | |
| Kneading is required to thoroughly combine all ingredients. | | |
| A hot oven is required for quick breads because a lower temperature dries them out before they are baked. | | |
| | **Analysis** | |
| The procedures followed will have an effect upon the end product. | Prepare muffins at home and bring to class.<br>Analyze and discuss the product. | Evaluate. |

### Concept 3: Techniques of cereal cooking.

### Objective 3: Application of the principles of preparing cereals.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Cereal is a starch food. | Read references on cereals. | Contribution to discussion. |
| Cereals are cooked in a large amount of water to prevent pieces sticking together. | Filmstrip from Wheat Flour Institute.<br>Make up a cereal bulletin board.<br>Demonstrate the cooking of cereal. | |
| | **Comprehension** | |
| | Discuss cereal references, filmstrip, and the various ways in which cereals are used. | |
| | **Application** | |
| Hot water softens, expands, and bursts starch granules. | Girls prepare cereal for use in casserole as part of meal pattern. | Prepared cereal. |

### Concept 4: Preparation of casseroles.

### Objective 4: Analysis of the principles involved in preparation of casserole dishes.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge — Comprehension** | |
| A casserole is a dish which may combine meat, fish, eggs, cheese, or ready-cooked chicken with rice, macaroni, noodles, canned vegetables, | Read — casserole dish combinations and types of casseroles.<br>List basic varieties.<br>Survey class for favorite casserole dishes. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| cream soups. | Discuss principles involved in the cooking of casserole ingredients; i.e., cereals, noodles, proteins. | |
| Cereals are extenders for more expensive foods. | Demonstrate cooking cereal — cooking noodles. | |
| Eggs are used as binding agents. | Discuss and score product. | |
| Cheese requires low heat to prevent "stringiness." | Discuss utensils that might be used and placement in oven. | |
| Casseroles glamorize leftovers and inexpensive ingredients. | Demonstrate combining cheese with white sauce. | |
| | **Application** | |
| | Cook cereals and noodles or rice for a casserole dish and use as part of a meal pattern. | Evaluate. |
| Casseroles baked in Pyrex need a lower oven temperature than those baked in metal. | Prepare a casserole dish containing protein as a part of a meal. | |
| | Discuss with mother and prepare a casserole dish at home. | |
| | Survey members of the family. | Written report. |
| | **Analysis** | |
| A variety of foods may be combined into casserole dishes which are nutritious and economical. | Place the casserole dishes in different categories. | |

## Concept 5: Techniques of salad making.

## Objective 5: Employment of the techniques of salad making.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Salads are an excellent source of vitamins and minerals. | Reference on salad greens and salad dressings. | |
| | View filmstrip: "Song of a Salad." (Heinz) | |
| | Make a list of fresh vegetables that are used in a tossed salad. | |
| | Demonstrate washing and drying of lettuce. | |
| Shredding or tearing leafy vegetables saves bruising. Unpeeled vegetables and fruits add attractive color to a salad. | Demonstrate ways to cut tomatoes, cucumbers, green pepper, cauliflower, and radishes. | |
| | Demonstrate shredding cabbage using salad maker and a knife. | |
| | Demonstrate making Waldorf salad: dicing apples, chopping nuts, and cutting celery. Garnish. | |
| | **Comprehension** | |
| Cleaning salad ingredients and storing them immediately after purchase keeps them in best condition. | Discuss filmstrips. | Contribute to discussion. |
| | Discuss types of greens, their care, ways to prepare and ways to garnish. | |
| | Discuss types of dressing and differences in ingredients, preparation, and the kinds of salads on which it is used. | |
| | **Application** | |
| The oil and vinegar combination in French dressing is a temporary emulsion. | Students prepare French dressing for tossed salad. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Using a variety of greens, combinations of vegetables or fruit provides opportunity to be creative in meals. | Students prepare tossed salad; Waldorf salad or coleslaw; molded salad as part of a meal pattern.<br>Prepare different types of salads at home. | Salads prepared. |

## Concept 6: Preparation of desserts.

## Objective 6: Perception of the principles involved in the preparation of desserts.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge and Comprehension** | |
| Easy to prepare desserts include butter cakes; powdered sugar and packaged frosting; uncooked fudge; drop, bar, and refrigerator cookies; baked custard, frozen custard, sherbet, dried fruit whip, and sauces. | Read — preparation and storing of butter cakes, bar, drop and refrigerator cookies. | |
| | Filmstrip, "The Art of Cake Baking" and "The Art of Making Cookies," General Mills. | Discuss. |
| | Survey class for significance of cakes and cookies for celebrations and other family functions. | |
| | Display pictures of various types of cakes and cookies on a tack board. | |
| | Demonstrate butter cake, bar, drop and refrigerator cookies. | |
| | Discuss variations of each. | |
| | Display pictures of cookies for various purposes on tack board. | |
| | Arrange bulletin board on cookies from different countries. | |
| | Read references on uncooked and broiled frostings. Discuss. | |
| | Discuss the statement "Frosting on the cake is the proverbial extra bit of goodness." | |
| | Demonstrate uncooked frosting and fudge. | |
| | Discuss broiled frosting. | |
| | Discuss prepared frostings available. | |
| | Read text on fresh and dried fruits. Demonstrate cookery of fruit in water and in syrup. | |
| | Restore liquid to dried fruits. | Discuss. |
| Eggs are the thickening agent used in custards, sherbets, and fruit whip. | Read references on eggs used in custards, meringues, sherbets. | |
| | Bulletin board involving desserts such as custards, sherbets, and fruit whip. | |
| | Discuss the reference materials and bulletin board information. | Contribution. |
| | Demonstration on preparing baked and cooked custards, fruit whip, and sherbet. | |
| | **Application** | |
| The gradual adding of sugar to the creamed fat enables the sugar crystals to absorb the fat, distributing it evenly. | Bake a type of butter cake as part of a meal pattern. | Cake and cookie mixes. |
| | Apply score card. | |
| | Bake a cake at home and bring a piece to class. | |
| | Bake variations of cookies for an FHA tea. | |
| Sugar aids in giving the golden-brown color to the crust of light colored cakes. | Bake a cake for mother's dessert luncheon. | |
| | Demonstrate the preparation of a butter cake. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Egg protein strengthens the gluten framework. Eggs added to the creamed fat and sugar contribute to leavening power. | Bake cookies as part of a snack and invite and serve to boys in another class.<br>Discuss methods of storing cookies. | |
| Excess of egg in the cake batter produces a rubbery, tough crumb. | | |
| The liquid makes gluten from the flour proteins and causes the baking powder to act. Baking powder in excess produces a coarse texture and a harsh, gummy crumb | | |
| Confectioner's sugar is the most suitable sugar for uncooked frosting. | Prepare uncooked frosting, as well as fudge and broiled frosting at home.<br>Write report. | |
| Uncooked frostings that contain fat, remain soft and creamy. | Prepare frosting for a cake prepared as part of a meal. Frost cupcakes for the children's party. | |
| Fruit cooked in water becomes mushy while fruit cooked in syrup retains its shape. | Prepare cooked and dried fruits as part of a meal.<br>Discuss variations and combinations.<br>Prepare cooked and dried fruits for a family meal. | Written report. |
| Cooking fruit as short a time as possible helps retain the flavor. | Discuss results with mother.<br>Prepare custard, fruit whip, and sherbet as part of a sample meal. | Product prepared. |
| Desserts made with eggs add many nutrients to the diet. | | |
| | **Analysis** | |
| The ingredients and proportions used, the techniques followed, the type of pan and the temperature will have an effect on the end product. | Score and analyze each product. | |

## Concept 7: Techniques of freezing prepared foods.

## Objective 7: Application of the techniques in freezing prepared foods.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| The method used in freezing prepared foods is important in retaining food flavor, value, and texture. | Read references on freezing prepared foods.<br>Display of wraps for freezing. | Evaluation. |
| | **Comprehension** | |
| Selection of a moisture-vapor-proof container or package helps to insure prevention of freezer burn and spoilage of foods. | Discuss the references and materials in Display Demonstration on how to wrap: cakes, cookies, muffins, casseroles, for freezing. | Contribution to discussion. |
| | **Application** | |
| The preparation and freezing of foods to be used later saves time. | Prepare foods — cakes, cookies — for freezing and freeze. | Prepared wrap for freezing. |

## GRADE 9

## THE SCIENCE OF FOOD

### Introductory Statement

This resource unit emphasizes scientific principles applied to the preparation of foods. Food preparation should be fun, creative, and integrated with principles from science to insure individuals and families the greatest utilization of foods and their nutritive values.

The study of planning and preparing nutritious meals for individuals and families includes not only a study of food values and diet planning, but involves scientific principles of food preparation. There is nothing in the universe that is not a part of chemistry. Most of the changes in food preparation are both physical and chemical. Much of the nutritive losses in food may be eliminated through an adequate use of the principles of chemistry applied to food preparation.

The fourteen-year-olds are optimistic and full of great amounts of energy. They are realistic and objective in their judgments, and look at both sides of the issue. They have increased in ability to do logical, independent thinking, to think through all aspects of a situation, and to generalize. They are developing a "scientific attitude," open-mindedness, and a desire to know.

They are not as interested in actual food preparations as they were a year ago. Thus, it is important to make market trips to study consumption and buying principles, convenience methods to coincide with good management, and the science principles involved in the preparation of foods instead of food production for all experiences.

The fourteen-year-olds are friendly and outgoing. Because they are interested in people, they are more apt to want to do things to please them. They are ready to use their knowledge of manners as well as hostess or guest responsibilities to have a more pleasant association with people.

**Unit objectives:**

I. Appraisal of food purchasing plans for optimum nutrition yield per dollar

  A. Analysis of the cost of available forms of foods on the market

  B. Evaluation of foods for money's worth when considering time, energy, quality, and eating satisfaction involved

  C. Identification of the buying guides available to the consumer

  D. Formulation of a plan for using and caring for special appliances to prolong their life and efficiency

II. Appraisal of the importance of nutritious meals for individuals and families

  A. Judgment about menus that satisfy the food requirements of individuals and families

  B. Evaluation of various types of food preparation using heat to determine the scientific principles involved

  C. Evaluation of various types of cold dishes to determine scientific principles involved in their preparation

  D. Analysis of the relationship of food to social communication

I. Major Concept: Use of the food dollar.

Broad Objective I: Appraisal of food purchasing plans for optimum nutrition yield per dollar.

Broad Generalization: Planning, preparing, and serving attractive, nutritious, economical meals requires knowledge of money management.

Concept A: Influence of foods available on the market.

Objective A: Analysis of the cost of available forms of foods on the market.

**Generalization: Foods available on the market affect choice and the amount of the dollar spent on food.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Several forms of the same food may be available. | Read references on forms of foods available, dried, mixes, frozen, canned, fresh, dehydrated. | |
| | Take a study trip to a supermarket to compare cost of foods available in various forms. Assign a specific food to each girl. | Written report. |
| | Have a display on various can sizes — American Canners Association. | |
| | Display a food item in its various forms. | |
| The prices on food items are not constant. | Display a food item with its various costs. | |
| | Show how a seasonal food changes price from one season to another. | |
| | **Comprehension** | |
| | Study displays and write a summary of how costs change as the forms change. | Written summary. |
| Each form of a food serves a special function to the homemaker. | Write a report explaining when the homemaker might use the various forms of a food, or write a paper on "when is a convenience food a wise purchase?" | Written paper. |
| | Bulletin boards on new developments put up by the students. | Students' bulletin board. |
| | Double ring discussion on benefits received from using new developments in foods. | Observe discussion on benefits. |
| | **Application** | |
| The fluctuation in food prices often depends on the form. | After the visit to the market, write comparison report. | Students' written comparison report. |
| | Compare the cost of a few food items in their various forms. | |
| The fluctuation in food prices frequently depends on section of the United States where the food was raised. | Compare the cost of a serving of ready-to-eat cereal when purchased in large box, a small box, and in a variety box. | |
| | Compare cost of fresh fruit or vegetable raised in the state with that raised in distant states. | |
| New developments in food affect the consumer's planning, selecting, and spending in the food area. | Plan a simple luncheon, demonstrating ways of eliminating waste of time and energy by the types of food selected. | Checking choice of foods. |
| | Shop for one specific fruit or vegetable in different forms. Prepare in same manner. Compare cost, flavor, time, and energy used. | Comparison report. |
| | **Analysis** | |
| The packaging, form, size, and kind all influence the price of food. | Identify the factors which affect the various costs of foods. | Written analysis. |

**Concept B: Effect of the cost of foods available on the market.**

**Objective B: Evaluation of foods for money's worth when considering time, energy, quality, and eating satisfaction involved.**

### Generalization: The cost of foods available influences the choice of foods for family meals.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Local market conditions influence family food costs. | Study costs of certain foods at a variety of stores, home-owned, supermarket, neighborhood, discount, cash and carry, to recognize factors which influence the cost. | Written report. |
| | Ask a resource person to discuss local food costs and problems. | |
| The cost of food varies with the quality. | Study costs of the same food, but of different qualities. | |
| | **Comprehension** | |
| | Discussion of quality of foods and when the top-quality or lower quality may be used. | Contribution to discussion. |
| When people have learned to like a variety of foods, they can more easily adjust their diet to changing conditions. | Compare cost of various basic foods and determine adequate economy substitutes for traditional meal components. | |
| | Write menus using foods which are adequate economy substitutes for more expensive foods. | Menus. |
| Native foods can lend variety, appeal, and economy to family meals. | Discussion of foods which are native to student's family and are economical. | Contribution by class members. |
| | **Application** | |
| Low cost meals can be successful, adequate meals. | Write menus using low cost foods. Check these menus for adequate nutrition. | Menus. |
| | Make out market orders for these menus. Purchase if possible or check for actual cost. | Market orders. |
| Proper use of leftovers can make for economy in family meals. | Find menus and recipes for use of leftover foods. | |
| | Students may demonstrate or explain how they might use leftovers. | Demonstration or explanation. |
| | **Analysis** | |
| | Chart the cost of a leftover meal compared to the initial meal. | Comparison. |
| The quality of food purchased may depend upon use by the homemaker. | Analyze menus for use of various qualities of food. Identify reasons for use of the particular quality. | |
| | **Synthesis** | |
| The amount spent for food is influenced by other family expenditures. The usual proportion of the family income for food is approximately 30 per cent. | Home experience — keep a record of food costs for your family. | |
| | Propose ways for reducing the food cost for your family. | |
| | Devise a plan for spending which will divide the food dollar into proper amounts for each of the four groups. | Plan. |
| | **Evaluation** | |
| | Have students judge foods for money's worth, for convenience, quality, and eating satisfaction. | |
| | Home experience — have students purchase food for their home, applying criteria learned. | Report of purchase. |

**Concept C: Development of food standards.**

**Objective C: Identification of the buying guides available to the consumer.**

**Generalization: Food labels and advertisements may aid the consumer in selecting the products which more nearly meet his needs.**

**Concept 1: Importance of food labeling.**

**Objective 1: Discovery of the relationship between food labels and easier selection of foods.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| A label is all the written or printed matter that accompanies a food in any way. | Prepare bulletin board "Home Label Will Read." | |
| The value of a brand name is determined by the shopper's knowledge of standards behind the brand name. | Read references on labels and labeling. | |
| | Collect labels from food packages, not just labels from cans. | Labels collected. |
| Manufacturers, government agencies, and food laws are helpers in consumer buying. | Read and report on the<br>1. Federal Food, Drug and Cosmetic Acts of 1906, 1938, and 1960.<br>2. Federal Meat Inspections Act<br>3. United States Public Health Service — milk ordinance code. | Reports by students. |
| The informed consumer is familiar with government regulations pertaining to food. | 4. United States Department of Agriculture on grading. | |
| | Have a federal or state meat or milk inspector talk on his work and how it protects the consumer. | |
| | **Comprehension** | |
| | Review government grades and can sizes by question-answer session. | Observe students reviewing. |
| | Look for examples of meat inspection in supermarkets. | |
| All information printed on the label needs to be true and to correctly describe the product. | Classify labels according to those which give little or no information and those which give clear, concise information. | Students classify labels. |
| | **Application** | |
| Certain basic information is required on foods. Additional information may be given. | From collection of labels write out:<br>1. Required information<br>2. Brand name<br>3. Additional information given | Written report on label information. |
| | Visit market and find brands that have the most helpful information on label. | |
| | Design a label showing only the required information. | Labels designed by students. |
| | Design a label showing additional information the homemaker might find useful in making her selection. | |
| | Ask each student to buy an assigned product using buying guides found on labels. | Check buying project. |
| | **Analysis** | |
| Food labels may promote easier selection of foods. | Identify the buying guides used in buying the item assigned. | Identification of buying guides. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Analyze the difference between grades, descriptive and required labeling. | Analysis. |

Concept 2: Advertising safeguards.

Objective 2: Discovery of the relationship between food advertisements and easier selection of foods.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Advertisements are helps for shopping. | Collect advertisements on foods from newspapers and magazines. | Advertisements collected. |
| | Study advertisements collected for examples of different types of advertisements. | |
| | **Comprehension** | |
| | Student bulletin board on advertisements. | Students' bulletin board. |
| | Classify ads according to those which give little or no information and those which give clear, concise information. | Classification of ads. |
| The more limited the homemaker is in regard to time, energy, and money, the more important decision making becomes. | Discuss ways advertising can assist you in making good use of your money, time, and energy in buying. | |
| | Oral reports on the sale policies of various markets. Discuss the economics of "Sale buying." | Oral reports. |
| "Sale Buying" properly used can save money on food costs. | | |
| False statements in advertising are prohibited. The consumer is protected by national agencies. | Give examples of misleading information in advertisements. Discuss the functions of the Better Business Bureau or the Chamber of Commerce with misleading advertisements. | Discussion by students. |
| | **Application** | |
| Advertisements promote easier selection of foods. | Assign a food for each girl to purchase according to ads she finds in *local papers*. Assign a food for her to purchase according to *national advertisements*. | Food selected. |
| | **Analysis** | |
| Getting adequate nutrition for one's money indicates that one is able to discriminate between fact and fallacy in the advertising of foods. | Identify helpful or misleading information found in the ads brought to class on the use of the food dollar. | Analyze ads. |
| | Analyze food purchases of each girl according to the ads she used. | |

Concept D: Use and care of small electrical equipment.

Objective D: Formulation of a plan for using and caring for special appliances to prolong life and efficiency.

Generalization: Proper use and care of equipment will increase its life and efficiency.

Concept 1: Use and care of small electrical equipment.

Objective 1: Formulation of ways to use and care for small electrical equipment that will increase efficiency and prolong life.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Small electrical equipment is used in many homes. | Read the use and care booklets for each appliance for care and operation.<br>Fry pan, blender, pressure saucepan, mixer, waffle iron, toaster, broiler, mixer, | |
| | Demonstrate how to scrape food out of fry pan. | |
| | Demonstrate how to pour out melted fat. | |
| | Demonstrate to show whether or not the pan could be immersed in water when washing. | |
| | Demonstrate how to put beaters in the mixer. | |
| | Demonstrate how to remove beaters safely. | |
| The manufacturer's booklet is a good source of information for the care and operation of the appliance. | Demonstrate how to stand portable mixer on counter. | |
| | Demonstrate convenient and safe storage of equipment. | |
| | Demonstrate use of equipment in food preparation. | |
| | **Comprehension** | |
| | Read recipes and interpret the reason for the speed or heat suggested for the use of the equipment in the preparation of a specified food. | |
| | Discuss the safety principles to follow when working with small electrical equipment. | |
| | Exhibit pictures of appliances on bulletin board to illustrate their various uses and care required. | |
| | Discuss features that save time and energy. | |
| | Show methods of appropriate care of appliances by displaying materials used in care. | Blackboard list.<br>Exhibit. |
| | List DON'TS in appliance care with reasons. | Blackboard list. |
| | **Application** | |
| | Students prepare a new food and use the electrical appliance that has been studied. | Grade on:<br>Plan<br>Work habits<br>Product |
| The care of small electrical equipment varies with its construction. | Clean appliance following method of care recommended. | |
| | Prepare a fluffy frosting or some similar product where constant beating is required. | Check the use and care of equipment, as well as the resulting food product. |
| A variety of uses of small electrical equipment can save time for the homemaker. | Have students help search for creative cookery using the equipment available. | |
| | Using small equipment, prepare a meal. | |
| | Plan refreshments for after a game or some other appropriate occasion using small electrical equipment. | |
| | Follow directions of handbook and experiment with the various uses each appliance has. Try to have several brands of each appliance available. Example: A blender chops, grates, mixes, and blends; a toaster-broiler toasts and broils. | Prepare foods by various methods and appliances.<br>Chart results. |
| | Then do these same types of jobs in another way. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Care for small electrical appliances is affected by the material, finishes used, and purpose. | Experiment with suggestions given about care for materials and finishes on appliances:<br>a. Chrome (applied finish)<br>Soap/detergent and water<br>Chrome cleaners<br>Glass wax<br>Silver polish<br>b. Porcelain enamel (applied finish)<br>Soap/detergent and water<br>Ammonia/soda and water<br>Appliance wax and cleaner<br>c. Stainless steel (material)<br>Cooking oil<br>Vinegar and water with nylon net<br>Stainless steel cleaner<br>d. Glass (materials)<br>Soap/detergent and water<br>Fine abrasives<br>Nylon net | Chart results. |
| | Show relationship of the principles of food cookery and principles of care as related to the life of appliances. Examples: blender, milk drink, rinse with cold water. Egg/food mixed, rinse with cold water. | Class discussion.<br>Demonstration. |
| | Analysis | |
| Correct use of small electrical appliances contributes to ease and efficiency. | Discuss data gathered for each appliance. | Check result chart. |
| | Compare results in regard to appliance used, and time and energy saved. | Discussion. |
| | Decide which is most economical appliance for time and energy. Explain decision. | Discussion or written report. |
| | Decide value of the different special features on each appliance. Explain each decision made. | |
| The small electrical appliance may be safely and efficiently operated if the appliance is cared for as suggested by the manufacturer. | Determine the best method of caring for appliance and explain your decision. | Group report.<br>Discussion. |
| | Compare two or more makes of each appliance in relation to the ease of care and efficient operation. Analyze and explain results. | Written report.<br>Discussion. |
| | Compare features of several models of each appliance and the additional care each feature will need. | List features. |
| | Analyze recipes to determine what equipment could be used and explain how it could be used in the preparation of food. | Compare findings on features. |
| | Synthesis | |
| A homemaker who has a knowledge of what a small appliance can do is able to adapt to it many new ideas of her own. | Take a neighborhood survey about uses made of small equipment. From data gathered and decisions made, try to determine other uses for appliances which would make a homemaker's task more efficient. Present positive reasons for selecting each appliance for use. Decide how important each appliance is for home use and school use. | Discussion.<br>Demonstration.<br>Discussion. |
| | Formulate a summary statement relative to correct use, ease, and efficiency of appliances. | Quiz. |
| | Plan and present a demonstration illustrating the principles of use, ease, and efficiency which an appliance demonstrator might use in promoting appliances. | Demonstration. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The use and care of small electrical equipment can make food preparation easy, can help develop recipes that are creative and different. | Prepare foods that would be served as a meal using a variety of blenders and toaster-broilers. Select appropriate methods of care for these specific uses and compare efficiency in operation. | Prepare food to determine validity of predictions. |
|  | Decide appropriate ways of caring for the various brands of appliances on display and give reason for decision. | Written report. |

## Concept 2: Use and care of dishwasher.

## Objective 2: Formulation of procedures to follow in the use and care of a dishwasher.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| Appliances are manufactured to meet specific needs of the homemaker. | Study use and care manuals and special sheets. Be particularly aware of information relative to the use of:<br>Detergent dispenser<br>Detergent, correct amount for water conditions<br>Filter screens<br>Uses of specific cycles<br>Operation of rinse additive dispenser<br>Correct loading procedure<br>Washing of special items.<br>Fine china<br>Flatware<br>Plastics<br>Stainless steel<br>Aluminum ware<br>Colored anodized aluminum<br>Iron skillets<br>Wood |  |
|  | **Comprehension** |  |
|  | Apply data read to use of dishwasher in the home and in the classroom. | Written report. |
|  | **Application** |  |
| Dishwashers correctly used save time and energy and produce a more sanitary dish than is possible with hand washing. | Load dishwasher in classroom following instruction manual. Wash different loads, varying detergent amounts. Have two identical groups of soiled dishes and utensils. Clock time spent handwashing in the one group as compared to the time spent in using the dishwasher by the other group. Use a thermometer to record the temperature of the wash and rinse water in the hand washing method and in the dishwasher respectively. | Student demonstration.<br>Record data. |
|  | Apply care methods suggested for specific features of specific dishwasher. Classroom or home appliance. | Class demonstration by student or written report on home appliance. |
|  | **Analysis** |  |
| Appliances correctly used can economically and effectively perform household tasks. | Decide which loading techniques are best for dishes or utensils to be washed. Use one type of glass as the control, Libby preferred. Observe results. Decide which glass gives best performance. | Report. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Discuss data for each dishwashing procedure. Compare in regard to time spent and sanitation involved. Decide values of each method. | Report. |
| | Compare care techniques reported by class members. | |
| | **Synthesis** | |
| | Select loading procedure and amount of detergent most suited to classroom use of appliance. | Teacher observes if students practice these procedures. |
| One who understands the capabilities of an appliance can adapt its usage to meet specific needs. | From data gathered and decisions reached, attempt to determine other uses for the dishwasher in easing homemaker's tasks than those mentioned in use and care book. | Report. |
| | Select care procedures to be recommended as good for:<br>a. Home use of appliance.<br>b. Classroom use of appliance. | Quiz. |

**II. Major Concept: Importance of nutritious meals for individuals and families.**

**Broad Objective II: Appraisal of the importance of nutritious meals for individuals and families.**

**Broad Generalization: Skillful planning, preparing, and serving of nutritious foods is essential to the health and well-being of individuals and families.**

**Concept A: Relationship of nutrients to personal and family needs.**

**Objective A: Judgment of menus relative to satisfying the food requirements of the individuals and families.**

**Generalization: Skillful planning for nutritious meals has an effect upon health and well-being of individuals and families.**

**Concept 1: Effect of Basic 4.**

**Objective 1: Application of the daily nutritional requirement as stated in the Basic 4 food groups.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| The four basic food groups are a daily nutritional requirement. | Give a pretest to determine previous learning in nutrition. | Pretest. |
| | Prepare bulletin board, "Crossroads to Good Health." Observe bulletin board and review food groups that make up the Basic 4. | |
| | **Comprehension** | |
| | Place foods in their groups on flannel board in wheel of good nutrition. | |
| | **Application** | |
| The Basic 4 is a simple guide to determine nutritional adequacy. | Collect menus from magazines and determine their nutritional adequacy by checking them against the basic food groups. | Evaluate. |

**Concept 2: Relationship of nutrients to a daily menu.**

**Objective 2: Evaluation of a daily menu for necessary nutritional requirements.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| All life is composed of and requires combinations of elements which, when utilized to form and maintain tissues or sustain activity, are known as nutrients. Food is the usual source of nutrients. | Read about the various nutrients, the amounts and sources of these nutrients which should be allowed for the maintenance of healthy bodies. | Quiz on adequate amounts and sources of nutrients. |
| A nutritious diet consists of adequate amounts of all nutrients. | View film, "Foods and Nutrition," EBF on nutrients and recommended daily allowances. | |
| Nutrients have important functions in the body. | Read and discuss the functions nutrients perform in maintaining attractive bodies. | Quiz on functions of nutrients. |
| | **Comprehension** | |
| | Discuss filmstrip, "How Vitamins Help Man," McGraw-Hill. | |
| | Divide class into four groups. Each group works out the reason for the foods in the group being important. Present findings in a panel. | |
| | Discuss:<br>What do nutrients do for the body?<br>Which foods contain each nutrient? | |
| A diet that consists of adequate amounts of all nutrients promotes health. | Discussion of nutrient needs and Recommended Daily Allowances of individuals during various periods of the life cycle, and the sources from where these nutrients can be obtained. | Discussion. |
| | Discussion of contributions of usual servings of foods to daily nutrient requirements. | |
| The diet one eats affects personal appearance. | Discussion of how nutrients affect personal appearance, personality, vim and vigor, and physical and mental efficiency. | |
| a. Nutrition affects the condition of the skin, the development of the muscles, the development of the teeth, and the growth of hair and nails. | Prepare bulletin board, "You are What You Eat." In groups find the answers to the following questions:<br>a. How can we obtain the personal appearance we would like to have?<br>b. How can we reach top physical and mental efficiency? | |
| The diet one eats affects personality, vigor, and ambition. | c. How can we achieve a pleasing personality and an abundant supply of energy? | |
| | Rat feeding experiment to observe how nutrition affects personal characteristics. | |
| | Arrange a tack board exhibit of newspaper and magazine pictures of persons showing signs of malnutrition. Discuss reasons for malnutrition in this country. | |
| | View pictures of a healthy teen-age girl. Discuss how she might have acquired qualities of good health. | |
| Lack of the essential nutrients is evident in the appearance of the individual. | Transfer the discussion from the ideal to self:<br>a. What things can we do that could help us individually acquire some of these qualities?<br>b. Do our present diets supply these needs?<br>c. If our diets are lacking in some essentials, how can we bring them up to standard? | Evaluate discussion. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Lack of essential nutrients is evident in the vim and vigor of a person. | View film, "Something You Didn't Eat," Minnesota Dept. of Health. Discuss why the men in the film became ill. What food cured them? | |
| | **Application** | |
| Hunger is an uncomfortable physiological state which occurs in the absence of food and often influences and may dominate behavior until relieved. | Supervised study for danger signals and reasons for "hidden hunger," followed by role-play of a situation which illustrates how ninth graders cope with the "being starved feeling" after school. Lead a discussion about what snacks are nutritious. | |
| Individuals have need for all nutrients but their differences in ability to store and synthesize nutrients influences the kind, amount, and timing of intake needed for the most effective utilization of food. | Study what nutrients are found in meats, lacking in meats. What kinds of foods are needed to supplement a diet mainly of meat, gravy, potatoes, and bread. | Evaluate role-playing situation and follow-up discussion. |
| | Compare nutrients in various dishes prepared with meat, eggs, cheese, legumes, and peanut butter. | |
| Each nutrient has specific functions and also influences the functioning of other nutrients. | Study what is meant by complete and incomplete protein and the combination of them in a menu to meet daily protein requirements. | |
| | Suggest salads, sandwiches, and desserts to serve with low quality of protein in the menu. | |
| | Plan a fruit plate, a vegetable plate, and a protein-type salad. What nutrients would be present in each? | Evaluation of plans. |
| | What would be served with each of these main luncheon dishes in order to have a well-balanced meal? | |
| | **Analysis** | |
| Inadequate, excessive, or imbalance in intake of nutrients may be detrimental to health. | Keep a three-day record of food intake and compare it to daily requirements periodically throughout food unit. | |
| | Analyze the food record. Write a plan to improve diet. | Evaluation of plan. |
| | **Synthesis** | |
| | Improve three-day menu by making modifications where necessary. Set individual goals for major personal characteristics. Develop a nutrition plan to accomplish these goals and make chart to show progress: Personal characteristics: Desired outcome: Weeks: What I accomplish: Food facts that I'm applying to accomplish goals. | Evaluation of charts. |
| | **Evaluation** | |
| The amount and kind of nutrients needed by individuals will vary according to their age, sex, size, activity, climate, and physical and emotional state. | Plan a dinner menu building on nutrients gained in the breakfast and lunch meals. Menu given. Consider and plan for nutrient needs of family members. | Evaluate menu plan. |

**Concept 3: Development of menus for one day.**

**Objective 3: Appraisal of menus incorporating the basic foods to be included in a day's meals.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| A meal pattern incorporates the basic foods which are included in the day's meals. | Read references on meal planning.<br>View filmstrip, "What Shall We Eat?" National Dairy Council, 221 North LaSalle St., Chicago, Illinois. |  |
|  | **Comprehension** |  |
| Variety in each meal can be obtained by using different menu patterns, types of food, methods of preparation, and ways of serving. | Discuss the foods usually served in the three classifications of meals: light, medium, and heavy.<br>Discuss principles of meal planning. | Contributions to discussions. |
| Six points to check variety in meal planning are shape, color, flavor, texture, temperature, and food. | Prepare bulletin board: "Let Planning Chase the Menu Blues Away."<br>Discuss factors influencing choice of food: Age, occupation, customs, health. | Evaluate bulletin board. |
| Characteristics of the family have a role in food choices. |  |  |
|  | **Application** |  |
| Eye appeal is necessary for meals to be eaten with enjoyment. | Plan sample menus incorporating principles of good nutrition. Check menus for nutritive value, cost, color harmony, and length of time to prepare. | Evaluation of menus. |
|  | **Analysis** |  |
|  | Divide class into groups to analyze prepared menus. Discuss. |  |
|  | **Synthesis** |  |
| Different methods of preparation will vary the appearance of the entire meal. | With a list of foods have girls work in groups or individually to plan meals which would vary in the methods of preparation for the purpose of attaining meals that would appear different. | Evaluate. |
|  | **Evaluation** |  |
|  | From student's previous food record, evaluate the day's menus to see if they meet nutritional requirements. Use a score card for judging the menus. |  |
| Careful planning of family meals will result in better health of the individual family members. | As a class, plan family menus that will meet the nutrient needs of all family members.<br>Individual students plan menus to meet needs of own family. | Evaluate. |

Concept B: Scientific principles in preparing foods with heat.

Objective B: Evaluation of various types of food preparation using heat to determine the scientific principles involved.

Generalization: The quality of nutrition and foods will be affected by methods of cooking and handling.

Concept 1: Effect of nutritive loss by cooking.

Objective 1: Determination of the implication of various cooking methods on loss of nutrients and substances.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| Vitamins A, thiamine, and niacin are fairly stable to | Ask a science teacher to explain effect of heat on foods and nutrients. |  |

**CONTENT**

heat.

Vitamins D, E, K, and riboflavin are stable to heat.

Calcium is quite stable to heat.

Vitamins A, D, E, and K are soluble in fat.

Vitamins C, B1, B2, and niacin are soluble in water.

Baking and roasting are considered best for retention of nutritive values of food.

Boiling for long periods causes vitamin loss. The greatest nutritive loss is vitamin C.

Cook vegetables in their skins when possible to save nutrients.

Niacin is dissolved in the water while cereal is cooking, so let water absorb in cereal.

Reheating foods leads to loss of additional nutrients.

Rapid boiling does not cook any more quickly than slow boiling.

Braising less tender cuts of meats will retain nutritive values if cooking liquid is eaten and the cooking period is not prolonged.

Broiling and pan broiling are excellent methods for retention of nutritive values, if the temperature is kept low and cooking period is not too long.

Vitamin A might be lost in the deep fat frying of yellow or green vegetables.

Electronic cooking reduces cooking time and will retain nutritive value.

Pan frying is satisfactory for meat and certain vegetables, but great care must be taken if green or yellow vegetables are pan-fried since vitamin A may be lost.

**EDUCATIONAL EXPERIENCES**

Show and discuss films: "Principles of Cooking," and "Principles of Baking," Encyclopedia Britannica Films, Wilmette, Ill., 11 min. each.

Filmstrips: "Bacteria — Good and Bad" — 44 fr color; "Eat Well! Live Well!" — 52 fr color; "Enzymes: Spark Plugs of Life" — 48 fr color. McGraw-Hill.

Reference readings about the effect on nutritive value of different types of cooking methods. May find reference texts in library.

Define: Baking, roasting, boiling, broiling, steaming, poaching, frying, simmering, braising, pressure saucepan.

**Comprehension**

Student panel on "How heat affects foods and nutrients."

Students prepare research manual with above information, definition of terms, summaries of films and filmstrips, pictures of foods from Basic 4 Food Groups that can be baked, boiled, steamed, poached, broiled, fried, simmered, braised, roasted, and cooked in a pressure saucepan.

Write a paper on metals used in cooking equipment — advantages and disadvantages.

Discussion of film: "Principles of Cooking," University of Minnesota.

**IDEAS FOR EVALUATION**

Discussion. Exhibit types of cooking equipment and label for slow or quick cooking.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Pressure cooking avoids overcooking and small loss of vitamins. | | |
| Nutritive values are retained very well while steaming foods, if they are not overcooked. | | |
| Cooking makes starch better able to digest enzymes, although cold water does not affect it, the starch grains absorb warm water which causes them to swell and rupture. | | |

**Concept 2: Principles of batters and doughs.**

**Objective 2: Judgment of changes taking place in various methods of preparation of batters and doughs.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| The classification of batters and doughs includes: | Read about batters and doughs. | |
| 1. batters which may be beaten or stirred and designated as pour or drop depending on amount. | Filmstrip: "Batters and Doughs." Betty Crocker. | Quiz on film. |
| 2. doughs which are a thicker mixture and which are kneaded | Define: volume, texture, kneading, dough, elasticity, batter, cohesion, gluten, plasticity. | |
| | **Comprehension** | |
| | Discussion of different types of batters and doughs. Students give common examples of each type. | Contribution to discussion. |
| | Discussion of film, "Principles of Baking," University of Minnesota. | |
| The role of the ingredients is similar in the different types of batters and doughs. | After discussion of role of ingredients, students predict results in products where a substance has been forgotten.<br>Discussion of substitutes that can be made to have a similar effect. | Evaluate. |
| A leavening agent is a substance which forms bubbles of gas in a batter or dough, thus making it light and porous.<br>There are three types of leavening agents:<br>1. physical-steam, air<br>2. chemical-soda, and acid, baking powder<br>3. biological-yeast | Discussion of role of leavening agents and use of each in various products. Compare soda and baking powder by introduction to chemistry of the reactions. | Observe student understanding. |

The experiments for batter and doughs, sugar cookery, starch, gelatin, vegetables and frozen desserts which follow were adapted from West and Sobye, *Handbook of Food Preparation.* Macmillan, 1937.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Batters and doughs vary in complexity according to the ingredients used. | **Application**<br>1. Experiment with preparing products using different leavening agents:<br>a. Prepare a product using steam as the leavening agent — popovers.<br>b. Prepare a loaf bread using baking powder — mixed by muffin method.<br>c. Prepare a sponge cake — using air as a leavening agent.<br>d. Prepare batter breads using yeast as the leavening agent. | Check students' ability to follow directions.<br>Evaluate students' methods as they are working. |
| Three different types of baking powders may result in differences in end product. Tartrate baking powder is quick acting; phosphate is slower acting; and sodium aluminum sulfate (SAS) is double acting. | Use three different types of baking powder in the preparation of muffins.<br>Check containers to determine possible variations in amounts to use.<br>2. Experiment with different leavening agents to compare the rate at which carbon dioxide is given off:<br>a. Place 2 tsp. of each type of baking powder in glass beaker. Add ½ cup cold water and stir. Note speed at which gas is given off.<br>b. Place beakers on asbestos mat over burner and note if more is given off.<br>c. Place ½ tsp. soda in beaker and add ½ cup cold water. Note whether any gas is given off. Add 1 tsp. cream of tartar. Note speed with which carbon dioxide is given off. Heat and compare with previous experiment. | |
| The factors that affect the texture of the finished product are: (a) ingredients (b) proportion of ingredients (c) kind and amount of leavening agent (d) the extent of mixing (e) the temperature of the ingredients when mixed (f) the method of mixing. | 3. Experiment with pastry:<br>For these experiments use ½ cup of flour — roll pastry and bake in a pie pan.<br>a. The kind of flour — prepare pastry by the standard method using all-purpose and cake flour.<br>b. The amount of fat — prepare by the standard method using an extra tablespoon of fat with all-purpose flour. Note amount of water needed and resulting tenderness.<br>c. Various kinds of fat — using 1 cup flour, substitute for lard; hydrogenated fat, vegetable oil, butter. Compare for texture, flavor, appearance.<br>d. The method of mixing — compare pastry prepared by the standard method and the hot water method. | Observation of students. |
| In each batter and dough product there is an optimum relation between the fat and gluten. | 4. Experiments with cakes:<br>a. Prepare ¼ of a cake recipe prepared by the conventional method with one student using all-purpose flour, possibly also bread flour.<br>b. After cakes are cool, wrap ½ to be saved or frozen — place ¼ on instructor's tray and rest of cakes on table for scoring. Score as many samples as possible. During the following period, recheck scores to determine the | Observe students. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The moisture content of flour varies. The greater the percentage of moisture in flour, the less will be its absorption. | effect of staling on the cakes made with two kinds of flour. | |
| Fat helps to retain moisture in baked products. | c. To determine the effect of adding flour and liquid with different amounts of mixing use a standard recipe with these variations:<br>(1) Use 100 strokes in adding the flour and liquid and pour ⅓ batter into pan, (2) Stir an additional 150 strokes, (3) Stir an additional 250 strokes. Compare the volume, shape, and crust. | |
| Ingredients may be varied within a limited range and still produce a successful cake. | d. Compare a cake made by the conventional method with one using the muffin method of mixing. Relate texture and time of mixing. | |
| | e. Compare cakes requiring varying amounts and kinds of fat, sugar, eggs, flour, leavening agents as to size, shape, color of crust, grain, texture, flavor. | |
| Sour milk with soda gives a more tender texture. | f. To determine the effect of using sour milk and soda, substitute ⅓ cup of sour milk for sweet milk, calculate the amount of soda and baking powder to use and mix with 200 strokes. What is the effect of acid and alkalies on the gluten? Why is more mixing needed? | |
| Egg whites form the structure of angel food cakes. Cream of tartar is used to increase the acidity of the mixture and to strengthen the walls of air cells by coagulation of the protein. | g. To determine the effect on the volume and texture of angel food cake use ¼ recipe. (1) Beat the egg whites until stiff and dry. Fold half the sugar with 8 strokes, and the flour and other half with 18 strokes. Bake 300°F. (2) Beat the egg whites until stiff but not stiff enough to form peaks when beater is lifted out. Proceed as in (1). Compare as to volume, texture, tenderness, and flavor. | |
| Too high a temperature at the beginning does not give time for stretching the cell walls and also toughens the protein. | h. To compare the effect of temperature on angel food cakes, bake the above proportions at 350°F. | |
| | 5. Experiments with stiff doughs: May be incorporated into Advanced Unit instead. | |
| | a. To determine the effect of various temperatures upon the growth of yeast (1) Mix ½ yeast cake with ¼ cup lukewarm water and 1 tsp. sugar. Mix in enough flour to make a stiff dough. Put in place with temperature about 80°F. Note time it takes to double in bulk. (2) Repeat but substitute ¼ cup rapidly boiling water, (3) Repeat but use ¼ cup ice water. Put dough in refrigerator until time to judge other doughs. Note volume and then put in warm place until it doubles in bulk, (4) Repeat, (3), but put in warm place after mixing. | |
| Additional sugar aids in growth of yeast and hastens fermentation. | b. To compare the rate of growth of the yeast without sugar in the dough, mix ½ yeast cake with ¼ cup lukewarm water. Add enough flour to make a stiff dough. Put in warm place until double in bulk. Compare with dough in previous experiment. | |
| | c. Compare bread products made by the batter, straight-dough, and sponge methods. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Beating and kneading develop gluten. | 6. Experiment to test for gluten in flour. Cronan and Atwood, *Foods in Homemaking*. p. 136. Bennett, 1965. | |

**Concept 3: Principles of carbohydrate cookery.**

**Objective 3: Judgment of the changes that take place in various methods of carbohydrate cookery.**

**Concept a: Principles of sugar cookery.**

**Objective a: Analysis of the changes that take place in various types of sugar cookery.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Sugar is found in many forms: granulated sugar, powdered sugar, brown sugar — yellow, light brown, and dark brown. | Read about sugars and sugar solutions.<br>Define: crystallization, amorphous, hydrolysis, brittle, saturated, invert sugar. | |
| Agitation of a concentrated sugar solution favors crystallization, and the warmer the mixture the larger the crystals. | Demonstration on the making of fudge. | |
| The temperature of a cooked sugar solution at the time of beating is the largest single factor in controlling the size of crystals. | | |
| | **Comprehension** | |
| Candies made from sugar solutions are either crystalline or noncrystalline. | Discussion of differences in sugar and their uses.<br>Discussion of film: "Art of Making frosting," General Mills. | |
| Boiling temperatures are a measure of the concentration of a syrup. | Discussion of thermometer and "ball test" in determining the cooking time for sugar solutions. | Evaluate previous experiences. |
| | **Application** | |
| | 1. Experiment with the effect of heat on dry sugar or an amorphous solid: | |
| Melted sugar burns very easily because sugar melts at 160°C. There is more or less decomposition of the molecules when sugar is melted, the degree depending upon the temperature reached. The color deepens as the temperature rises and the flavor becomes increasingly bitter because of decomposition products formed. The decomposition products include organic acids which are neutralized by adding soda. | a. Oil a heavy plate or enamel pan and warm slightly.<br>b. Measure ¼ cup sugar — some also measure ⅛ tsp. soda for comparison.<br>c. Spread sugar evenly on the bottom of a heavy cast iron skillet. Heat slowly without stirring until sugar begins to melt, then stir with a wooden spoon slowly, keeping it evenly spread.<br>d. When most of the sugar is melted, add soda quickly, stir rapidly to blend and pour quickly onto plate. If soda is not to be added, pour the melted sugar onto the plate as soon as it is completely liquified. | |
| Carmelized sugar to which the correct soda is added should be lighter in color, milder in flavor, and of more porous texture than that to which no soda is added. | | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The length of time necessary to bring candies to a desired consistency depends upon the proportion of liquid used, the intensity of heat and the rapidity of evaporation. | 2. Teacher's silent demonstration to determine the effect of temperature on the solubility of sugar in order for students to develop for themselves the reasons why the evident results were obtained. | |
| As the water evaporates, the sugar becomes more concentrated and the temperature of the boiling syrup rises. | Procedure: Place ½ cup of cold water in a glass measuring cup. Add sugar, one tsp. at a time, stirring after each addition until mixture is clear. Repeat until no more sugar will dissolve and crystals are left on the bottom of the cup. Note the amount of sugar required. Repeat with boiling water. Heat the cold solution to boiling. Will more sugar dissolve in it? How much? | Observe. |
| If the mixture is cooled before it is stirred, smaller crystals form. | 3. To determine the effect of beating fudge at different temperatures, use ½ recipe and make the following variations:<br>a. Stir constantly while boiling.<br>b. Pour part of the syrup onto a marble slab or cold enamel pan and let cool before stirring. Then stir the remainder of the syrup in the pan while it is hot.<br>Compare the texture. | |
| Invert sugars retard crystallization. | 4. To determine the effect on crystallization of the addition of various interfering substances, prepare ½ standard recipe for fondant as a standard for comparison with products from the following:<br>a. Substitute 1 T. corn syrup for the cream of tartar.<br>b. Substitute 3 T. butter for the cream of tartar. Boil to 240°F.<br>c. Substitute ½ cup brown sugar for ½ cup white sugar. Omit cream of tartar. Boil to 240°F.<br>d. Omit the cream of tartar.<br>e. Increase the cream of tartar to 1 tsp.<br>Compare smoothness, pliability, and ingredients added. | |
| | Preparation of fudge and boiled frosting using ideas learned in experiments and discussions — may use frosting for cakes that were frozen. | Evaluate principles of preparation. |
| | **Analysis** | |
| The higher the temperature to which a solution is cooked, the greater the amount of hydrolysis. | Students analyze reasons for the effect on solubility of sugar. Teacher's silent demonstration. | Check papers. |
| | Analyze effect this has on sugar cooking. Give problem test where students determine "whys." | Evaluate. |

**Concept b: Principles of starch cookery.**

**Objective b: Judgment of the changes that take place in various types of starch cookery.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Most of the starches are ob- | References on starch cookery. | Quiz. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| tained from the cereals: rice, barley, rye, corn, and wheat. Starch is also obtained from tubers, with potatoes and sweet potatoes being the principle sources. Arrowroot is used to a limited extent. Tapioca, obtained from cassava, has been used for industrial purposes as well as for food. | Define: absorption, adsorption, hydration, viscosity, gelatinization. | |
| Starch mixtures are a good medium for bacterial growth. | | |
| Starch is insoluble in cold water and partially insoluble in hot water with which it is likely to be lumpy. Swelling of starch granules takes place in the presence of heat and moisture and is called gelatinization. | **Comprehension**<br>Discussion of different types of starches and principles of starch cookery. | Discussion. |
| Cool acid mixtures quickly to minimize hydrolyzing effect. | Discuss the handling of cooked starch solutions. | |
| | **Application**<br>1. Experiment on the types of starches:<br>a. Compare the effect of heat and the thickness and clearness of pastes prepared from various types of starch: Wheat (flour), corn, potato (precooked), tapioca, and rice (precooked). | |
| | **Procedure** | Observe. |
| Flour is used to thicken sauces, gravies, and puddings because of the starch. The thickness of the mixture depends upon the proportion of the flour to the liquid. If flour is added directly to a hot liquid, it tends to stick together and form lumps. To prevent this, one of three methods is used. 1) The flour may be mixed with a small amount of melted or liquid fat before the main liquid is added 2) The flour may be mixed with sugar 3) The flour may be first mixed with a small amount of the cold liquid ingredient of the recipe before it is added to all the liquid. | Mix two tablespoons of each starch with ¼ c. cold water. Compare the absorption of water by the different starches. Add ¾ c. of boiling water gradually, stirring constantly. Heat quickly to boiling and boil one minute. Pour into custard cups. Observe while hot. Cool and observe again.<br>Compare the resulting starch pastes as to clearness, color, thickness, and taste. How do they differ after cooling? | |
| | Soak two pans which have held flour mixtures, one in cool water and one in hot water. Note difference in ease of cleaning. | Observe students. |
| Cornstarch is similar to flour but contains more starch, a smaller proportion of cornstarch is needed for the same degree of thickening. | | |
| A starch mixture becomes thicker upon standing. When moisture evaporates from the | | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| **surface of a starch-gel during cooking or afterward, a skin forms on the surface.** | | |
| **Starch has great capacity for absorbing water (hydration).** | **2. Compare three methods of cooking rice.**<br>**Procedure**<br>**a. In a large amount of water**<br>**⅓ c. rice**<br>**4 c. boiling water**<br>**1 tsp. salt.**<br>**Add rice to boiling salted water and continue a rapid boil to keep the grains of rice in motion so that they do not stick together. Cook fifteen minutes. Drain in a strainer and wash off loose starch.**<br>**b. In a small amount of water**<br>**⅓ c. rice**<br>**¾ c. cold water**<br>**⅓ tsp. salt**<br>**Use a heavy metal pan. Add rice to salted water. Cover with tight-fitting lid; set over hot fire until it boils. Reduce heat as low as possible and simmer for 15 minutes. Remove lid and permit rice to dry. Use a fork to gently lift the kernels to prevent sticking to the pan.**<br>**c. Steaming**<br>**⅓ c. rice**<br>**¾ c. water**<br>**⅓ tsp. salt**<br>**Place ingredients in top of a double boiler and bring to a boil over the flame. Cover and cook over hot water until all the liquid is absorbed and the rice is tender.** | **Observe.** |
| **Use twice as much brown flour as white flour for thickening, when substituting browned flour for white. To give color to gravy use browned flour.** | **3. Compare the thickening power of browned and white starch.**<br>**Procedure**<br>**Place two tablespoons of flour in a small, heavy skillet and heat until brown, stirring constantly. Cool. Slowly stir in one cup of cold water. Heat to boiling, stirring constantly. Compare thickness and appearance with two tablespoons of unbrowned flour mixed in one cup of water and heated in the same way.** | **Observe.** |
| **Starch hydrolyzes readily when heated in the presence of acid, and eventually forms substances which lack thickening power.** | **4. Determine the effect of acid and sugar on the thickness of starch-thickened mixtures.**<br>**Procedure**<br>**a. In a small saucepan mix one tablespoon of cornstarch and two tablespoons of cold water to a smooth paste. Add ¾ c. cold water. Bring to a boil, stirring constantly. Continue to cook over a moderate flame for three minutes.** | |
| **Starch solutions with sugar added form increasingly softer gels with increasing sugar concentration. Starch solutions show increasing trans-** | **b. Proceed as in "a" but use two tablespoons lemon juice as a source of acid instead of the two tablespoons of cold water.**<br>**c. In a small saucepan mix one tablespoon cornstarch with one tablespoon sugar. Add two** | |

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|---|---|---|
| parency and tenderness with increase of sugar. | tablespoons cold water and mix to a smooth paste. Add ¾ c. cold water and continue as in "a." | |
| In lemon pie filling, the lemon juice is usually added after the starch, water and sugar have been boiled. | d. Proceed as in "c," but use four tablespoons of sugar instead of one tablespoon. | Observe students. |
| | Preparation of a white sauce to be used with macaroni for a meal. | |
| | **Analysis** | |
| Stirring while cooking starch mixtures will aid in obtaining a uniform consistency, but if too intense, it will decrease the viscosity of the mixture. | Analyze the experiments to determine the starch cookery principles. | |
| | Apply this to preparation of various types of starch cookery. | |
| | Questions relating to experiments: | |
| Some ingredients will accelerate the gelatinization while others retard the action. | 1. What tentative generalizations can be made from the results of the experiment? | Evaluate. |
| | 2. How can this knowledge be used in the preparation of food? | |
| | 3. What explanation can be given for the results? | |
| | **Synthesis** | |
| | Formulate a score sheet for starch products. | |
| | **Evaluation** | |
| | Problem solving in an essay form. | Evaluate. |

## Concept 4: Principles of gelatin cookery.

## Objective 4: Judgment of the effects of various preparations of gelatin upon changes in the end product.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| There are two kinds of gelatin: | References on gelatin. | |
| 1. The unflavored, clear gelatin; | **Comprehension** | |
| 2. The prepared gelatin dessert powders with coloring, sugar, and flavoring added. | Discussion of the differences between flavored and unflavored gelatin and different types of desserts that can be obtained. | |
| | Discussion of techniques used when combining gelatin with other foods. | Contribution. |
| The unflavored gelatin is dissolved in cold water or mixed with sugar before dissolving in hot water, while the flavored gelatin is dissolved in hot water. | | |
| | **Application** | |
| There are many types of gelatin desserts, the simplest being plain jellies and those with fruit added. Gels have been whipped to a frothy stage during the process of hardening. Snows or sponges have beaten egg whites | Gelatin experiments: | |
| | 1. Prepare different varieties of gelatin to make comparisons. | Observations of students working in laboratory. |
| | a. Unflavored gelatin using lemon or fruit juices. | |
| | b. Flavored gelatin — for ¼ use canned pineapple, ¼ use fresh pineapple, other ½ plain. | |
| | c. Flavored gelatin — using ice rather than cold | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| folded into them. Bavarian creams are gelatin mixtures combined with whipped cream and custard-base gelatins, have custard or milk to dissolve the gelatin. If fresh pineapple is used, its enzymes will prevent congealing of the gelatin. The fresh pineapple needs to be cooked and cooled before adding to obtain a satisfactory result. | water, whipping and adding whipped cream or whipped egg whites.<br>d. Bavarian cream using unflavored gelatin.<br>e. Use of the blender in making some types of whipped gelatin.<br>2. To determine the effect of various fruit juices on the stiffness of gelatin, use ¼ T. gelatin and ½ c. liquid lemon, grape, canned pineapple juice, and fresh pineapple juice. Put these gelatin solutions into individual molds and let stand for an hour at room temperature. Note whether gelation has taken place. Put into refrigerator for another hour. Note differences. | |
| | **Analysis** | |
| Results are most satisfactory if foods are added to gelatin after it begins to set.<br>Beaten cream or beaten eggs blend best if added as the gelatin begins to congeal. Gelatin acts as a stabilizer and gives smoothness to such products as frozen desserts and candy. It will incorporate air when beaten at the right stage.<br>For layer effects, each layer needs to be congealed before next layer is added. | Analyze the techniques used in preparing gelatin. | Evaluation of analysis. |
| | **Synthesis** | |
| | Develop a score sheet on the characteristics of various types of gelatin. Home learning experience trying to develop a new idea in a gelatin product. | Check.<br>Check results. |
| | **Evaluation** | |
| | Judge gelatin products made in class. | Evaluate. |
| | Test of problem situations relating to gelatin preparation. | Evaluate written test. |

### Concept 5: Principles of protein cookery.

### Objective 5: Identification of the tenderness of meat in relation to the principles of meat cookery.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| | Read references to recognize tenderness of meat, ways of preparing, storing. | |
| The tenderness of a cut of meat is concerned with the muscle location, amount of connective tissue, and age of the animal. | Define the following terms in relation to meat cookery: roasting, broiling, pan-broiling, deep-fat frying, braising, pot roasting, stewing, soup making. Observation of a meat cutting demonstration by local butcher to recognize location of muscle as guide to tenderness. | Quiz — Define meat cookery terms. |
| | Construct a bulletin board featuring beef chart to illustrate location of cuts of meat used in meat cookery. | On notebook size beef chart label cuts of beef. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Broiling, pan-broiling, and roasting are dry-heat methods of cooking meat. No water is used and the meat is left uncovered. | View filmstrip, "How to Cook by Dry Heat," — Swift, to recognize the principles of meat cookery for tender cuts of meat. | Summarize film. |
| | Observation of demonstration by instructor showing standard methods of preparation of various cuts of meat. | |
| | Read roasting time table to become acquainted with its use. | |
| | Observe the use of the meat thermometer in relation to principles of meat cookery. | |
| Braising and cooking in liquid are the moist-heat methods of cooking meat. | View filmstrip, "How to Cook by Moist Heat," — Swift, to recognize the principles of meat cookery for less tender cuts of meat. | Summarize film. |
| | **Comprehension** | |
| | From reading, discuss how kind, use, and location of the muscle has an effect upon tenderness. Also, age of animal, amount of connective tissue, and other factors influencing tenderness. | |
| | Discuss the relationship between tenderness of meat and cookery principles. | |
| | Draw conclusions from meat cutting demonstration in regard to tenderness of various cuts of beef. | |
| | Superimpose construction paper cuts of tender muscles of beef upon wall chart of beef carcass, to identify tenderness in relation to location. | On notebook size beef chart shade-in tender cuts. |
| Low temperatures are used in meat cookery to coagulate protein without toughening. Longer cooking time at low heat tenderizes the connective tissue, and there is less loss of moisture and fat resulting in a more juicy meat with better flavor than at a higher temperature. | Discuss the effect of temperature on roasting meat as seen in filmstrip to comprehend the tenderness of meat in relation to its principles. | |
| | Estimate time required for roasts of various sizes from timetable. | Estimate time required for roasts of various sizes, using timetable. |
| | Draw conclusions regarding the use of a meat thermometer relative to meat cookery. | |
| | Discuss ways of tenderizing meat as seen in the filmstrip in relation to principles of meat cookery for less tender cuts of meat. | |
| | **Application** | |
| The tenderness of a cut of meat is related to the principles of meat cookery. | Class groups prepare and serve simple dinners featuring tender and less-tender cuts of meat prepared by methods consistent with its cookery principles. | Evaluate product. |
| | **Analysis** | |
| Meat cookery consistent with its principles results in a palatable meat product for the enjoyment of the family. | Home experiences in preparing meat in a variety of ways. Report on results. | |

### Concept 6: Principles of vegetable cookery.

### Objective 6: Judgment of the changes taking place in various methods of vegetable cookery.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Qualities of well-cooked veg- | References on vegetable cookery. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| etables are: | Collect pictures of ways vegetables are purchased: fresh, frozen, canned, dehydrated. | |
| 1. A tender firm texture<br>2. An unchanged color | List different vegetables according to color groups. | |
| 3. Retaining nutritive value<br>4. Retaining natural forms<br>5. Retaining natural flavors | Collect pictures of major methods of preparing vegetables: Baking, boiling, creaming, steaming, raw, and pressure saucepan. | Pictures. |
| Vegetables are cooked in a minimum of water only until they are tender. | Filmstrip on vegetable cookery by Kraft Cheese. | |
| | List family's favorite vegetables and methods of preparing them. | Lists. |
| | **Comprehension** | |
| | Discuss nutrition of vegetables. | Discussion. |
| | Panel discussion on vegetable cookery. | Ask students to summarize the main points of the panel, either oral or written form. |
| | Examine pictures of vegetables and discuss effects of heat and cooking on them. | |
| | Visit a grocery store and list ways vegetables are sold. | Report findings to the class. |
| | Discuss filmstrip and readings. | Display and discuss pictures. |
| Vegetables add flavor, texture, and color to any meal. | Bring in and discuss family's favorite vegetables and ways of preparing. | Home experience and discuss. |
| | **Application** | |
| | Students in family groups experiment to determine the effect of heat on the following: | |
| Colors in foods are affected by heat, certain chemicals, and light. | 1) Yellow vegetables cooked in small amount of water, lid on, for short time. | |
| | 2) White vegetables cooked with cover off and water to cover, if strong, and with lid on if the white vegetables are mild; use a little water. | |
| | 3) Strong red vegetables in water to cover with no lid, and perhaps add acid (vinegar or tart apple) while cooking to keep color or add 1 tsp. soda to boiling water. | |
| | 4) Cook green vegetables in small amount of water with lid off the first few minutes of cooking and then cover. | |
| Pressure cooking avoids overcooking and small loss of vitamins. | 5) Cook green vegetables in pressure saucepan. | |
| | 6) Cook white vegetables such as potatoes in water to which ⅛ tsp. soda has been added or add 2 tsp. cream of tartar to the boiling water. | |
| Green color pigment reacts to acids and heat. Green vegetables cooked too long will turn to a drab, olive green. Baking soda added will retain bright green color, but destroys certain vitamins. *This is not recommended.* Yellow pigment in mild vegetables, red color in mild and strong vegetables, and white color do not react to heat and acid. | 7) Overcook any of the above vegetables.<br>8) Compile on score card qualities of well-cooked and over-cooked vegetables.<br>9) Time cooking period from the time the water starts to boil after the vegetable has been added. Determine optimum time of cooking for each vegetable. Note factors which might influence time of cooking in different samples of one vegetable. Compare with recommended times from a cookbook. | |
| Cooked carrots which turn brown are overcooked. | | |

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|---|---|---|
| Red color pigment dissolves in water unless an acid is added. | | |
| White pigment, if overcooked, turns a pinkish brown color which is associated with a strong and unpleasant change in flavor. | | |
| A short cooking time improves the flavor of the vegetables. A small amount of water reduces the flavor. | | |
| | **Analysis** | |
| Knowledge of significant chemical properties and the principles governing the physical and chemical processes used will contribute to understanding and control of the physical and chemical changes that occur during food processing and preparation. | Analyze results in vegetables cooked by the right method and the overcooked method of preparation. | Record findings on score card and discuss in class. |
| | **Synthesis** | |
| | Plan to get acquainted with a greater variety of vegetables. | Discuss plans in class. |
| | Make a list of vegetables from color groups that you do not know very well. | |
| | Plan family meals with these vegetables, and prepare them properly. | Home experience. |
| | **Evaluation** | |
| | Write a paper on how you preserved the food nutrients, color, and texture of the vegetables you prepared for your family. | Report to class.<br>Objective test. |

Concept C: Scientific principles in preparing foods without heat.

Objective C: Evaluation of various types of cold dishes to determine scientific principles involved in their preparation.

Generalization: The methods of preparation and handling will have an effect upon the quality of the food prepared.

Concept 1: Nutritive value of foods prepared without heat.

Objective 1: Comprehension of the implications of various preparation methods on quality of product.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Vitamins A, C, D, and riboflavin are sensitive to visible light. | References on vitamins, minerals, and cellulose. | |
| | Filmstrip: "How Vitamins Help Man." McGraw.<br>Exhibit various air-tight colored containers. | Discussion and quiz. |
| Vitamin E is stable to visible light. | | |
| Vitamin K is unstable to visible light. | | |

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|---|---|---|
| Vitamins thiamine and niacin are fairly stable to light. | | |
| Vitamin A is destroyed by ultraviolet light. | | |
| Vitamins E and K are unstable to ultraviolet light. | | |
| | **Comprehension** | |
| Vitamin C is an antioxidant. | Student reports on vitamins and minerals, their food sources, functions in the body, and how they can be destroyed in foods. | Teacher and student observation. |
| | Buzz groups for each vitamin and mineral and develop a bulletin board display. | Students record findings on score card of each air-tight container. |
| Lemon juice added to fruits and vegetables prevents darkening due to a chemical reaction which retards oxidation. Air and light destroy certain vitamins. | Discussion of vitamins destroyed by air and light.<br>Discuss why lemon juice is added to freshly cut fruits and vegetables. | |
| If foods are prepared in advance, cover from air and light, and store dry in a refrigerator. | | |
| Water is used to prevent oxidation by keeping foods from contact with the air. | | |

### Concept 2: Principles of preparing frozen desserts.

### Objective 2: Perception of changes that take place in the preparation of frozen desserts.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| The different kinds of frozen desserts can be classified on the basis of whether or not they are stirred during the freezing process. | Reading on different types of frozen desserts.<br>Define: frappe, ice, mousse, parfait, sherbet, stabilizer, freezing mixture, ripening, swell. | Quiz. |
| | **Comprehension** | |
| Another way of classifying them is to group them according to the ingredients they contain. | Discuss the principles of preparing the different types of frozen desserts by the method of preparation and the ingredients present. | |
| Kinds of frozen desserts: | | |
| Ices and frappes—made of sugar syrup that is flavored with fruit juice. | | |
| Sherbets—1) milk and juice; 2) contains gelatin or egg whites. | | |
| Ice Cream — cream is one of the ingredients. | | |
| Mousses — sweetened and flavored whipped cream not stirred during freezing. | | |
| Parfaits — sugar syrup and egg white or yolks with | | |

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| whipped cream, frozen without stirring. | | |
| As ice melts, heat is absorbed from the surrounding atmosphere and from objects in contact with the ice. Salt hastens the liquefaction of ice | **Application**<br>1. Experiment — Influence of salt on melting point of ice.<br>Crush ice, then mix quickly and thoroughly with the salt just before using. Use crushed or ground rock salt.<br>Prepare the following proportions of ice to salt: 1 to 1 using 2 c. ice to 2 c. salt; 6 to 1 using 2 c. ice to 5 T. salt; 12 to 1 using 2¼ c. ice to 3 T. salt. | |
| The temperature obtained by a salt and ice mixture depends upon the proportion of ice to salt, the size of the ice, amount and density of the brine, and the rate at which heat is applied. | Set custard cups half filled with milk into bowls and surround by ice and salt mixture. Add more ice and salt as needed.<br>Arrange a thermometer in the ice and salt mixture and record the temperature every minute until the temperature has reached the lowest point and begins to rise. | Observe. |
| Rapid freezing or freezing with little agitation tends to produce a coarse granular texture while slow freezing and thorough agitation tend to produce a fine texture. | Stir the milk frequently until frozen so that it is no longer mushy, scraping the milk from the sides and bottom of the dish as it freezes and record time required to freeze.<br>2. To determine the effect of different ingredients upon the size of crystals:<br>a. Dissolve ½ c. sugar in ¾ c. water and ¼ c. orange juice. Taste. Put the mix into the refrigerator to cool until ready to freeze it. Freeze by agitation.<br>b. Dissolve 3 T. sugar in 1 c. milk. Add ⅛ tsp. vanilla. Taste, cool, freeze in freezer tray without stirring.<br>c. Repeat (b) but use 1 c. 24 per cent cream in place of milk.<br>d. Soak 1 tsp. gelatin in 1 T. water, then dissolve in 3 T. boiling water. Stir gelatin into the mixture as given in (b) before cooling. Age, and freeze mixture.<br>e. Mix ½ T. flour, 2 T. sugar, ¼ c. milk, and ½ egg yolk. Heat over hot water, stirring constantly until thick. Cool and add ¼ c. cold cream and ¼ tsp. vanilla. Freeze as in (a).<br>Compare the taste of the frozen and unfrozen mixtures, as well as the body and texture. Note the difference in crystal formation.<br>Prepare examples of various types of frozen desserts; keep part to serve with meal.<br>**Analysis**<br>Analyze the frozen desserts prepared: 1) the effect of speed of freezing and the final stage of freezing on texture as illustrated by ices and frappes. | |
| Mixes which contain no stabilizers will melt more rapidly. | 2) The effect of added ingredients on the body and texture of a frozen sweetened fruit juice as illustrated by the use of gelatin, egg white, milk solids and fruit pulp in the sherbets. | |

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|---|---|---|
| Prolonged beating will cause the mixture to break down with a loss of incorporated air. | 3) The effect of using cream, evaporated milk, dry skim milk, and egg on the texture and body of ice creams frozen by stirring and without stirring. Compare those frozen in the refrigerator with those which are stirred as they are frozen. What other ingredients are used to improve the texture of ice creams frozen in the refrigerator? | Evaluate analysis of products. |
| | 4) Compare the effect of the type of mixture used in a mousse, a bombe, a bisque, and a parfait with that of the different types of ice cream on the texture and body and explain differences. | |
| | 5) Compare all of the products with different types of ingredients to see the effect on texture, flavor, and appearance. | |
| | **Synthesis** | |
| | Formulate a set of score sheets for the different types of frozen desserts. | Score cards. |

## Concept 3: Preparation of salad dressings.

## Objective 3: Perception of the changes that take place in the preparation of salad dressings.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| The place of salads at lunch, supper, or dinner varies. Salads may be served as 1) appetizers 2) main course 3) accompaniment 4) separate course and 5) dessert. | Readings on salad dressing.<br>View part of the filmstrip, "Song of a Salad," Heinz Co., pertaining to dressings. | |
| | **Comprehension** | |
| Most salads are prepared with a salad dressing. Whatever the dressing, it should give added zest to the salad. | Discuss types of dressings, their differences, and the salads that they may be used with. | |
| | Discussion of scientific terms related to dressings: emulsion — temporary and permanent, emulsifying agent, suspension, colloid, stabilizer. | Evaluate understanding. |
| There are three basic types of salad dressings:<br>1) French<br>2) mayonnaise<br>3) cooked-base dressings | | |
| An emulsion is a suspension of fine particles or liquid in another liquid. An emulsifying agent is a substance which acts as a stabilizer. Mayonnaise is an emulsion of oil in acid and water stabilized by a colloid. French dressing is a temporary emulsion of oil in acid and water without a stabilizer. | | |
| | **Application** | |
| The high surface tension of water tends to prevent the emulsification of water with | Prepare modified French and French dressing, mayonnaise and modified mayonnaise dressing.<br>Use to prepare vegetable salads. | Observe girls to check laboratory methods and principles. |

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| oils. Certain substances which lower the interface tension of oil droplets in water will aid in producing a perfect emulsion. | | |
| Stable emulsions may be made by either continuous or intermittent beatings. | **Analysis**<br>Analyze the differences in appearance, consistency, and flavor in dressings depending upon ingredients and method of preparation. | Check results. |
| The factors which may effect the end product include the temperature of the ingredients, the ingredients and proportions used, and the method of mixing. | | |
| | **Synthesis**<br>Formulate a set of standards for judging the different types of dressings. | Evaluate. |

**Concept D:** Food as a means of social communication for the individual or family.

**Objective D:** Analysis of the relationship of food to social communication.

**Generalization:** The use of food will be a means of social communication.

**Concept 1:** Food habits of people from other cultures.

**Objective 1:** Analysis of the food habits of people from other countries.

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|---|---|---|
| The heritage of our food customs comes from many cultures. | **Knowledge**<br>Read about the national traditions that are important in selection of food. | Inquiries and reading. |
| | Read about the religious traditions important in food selection. | |
| | Read about the regional food patterns in our own culture. | |
| | Ask someone in your school who has lived in another country or another part of the United States to tell about the differences in food customs,<br>or<br>Have mothers or other resource persons talk on their nationality backgrounds if they are different from American culture. | |
| | Have students write a summary of their talks. | Written summary. |
| | **Comprehension**<br>Discuss the food habits of people with national food patterns. | Discussion to bring out food habits. |
| | Discuss the difference in food patterns of regions of our country. | |
| | Discuss the religious prescriptions and/or prohibitions of eating certain foods. | |
| All families have customs which develop through the years. | Write a short paper telling of your family customs associated with foods. | Paper. |
| Food customs of another cul- | **Application**<br>Select and compare foods from different cultures. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| ture are often adapted into our food pattern. | Discuss how different foods can be integrated into our food pattern. | |
| | Arrange for class to eat as a group in a foreign restaurant. Observe and later summarize menus, food, service, and decor. | |
| | Try a new foreign food, a food from a different region, and/or a religious-oriented food at home. Home experience. | Written summary. |
| | Analysis | |
| Understanding other food habits may result in better social communication. | Classroom speakers report on various cultural foods or relate cultural food habits of their own families. | Given a situation of various food habits, identify how these bring about socialization. |
| People are likely to accept a wide variety of foods if they have a wide experience, knowledge, and appreciation of foods and if their environment reinforces positive attitudes. | Identify how various food habits affect socialization. | |
| | Analyze how food from different cultures may bring social communication to our culture. | |
| | Plan a social activity to introduce different foods to your friends. Home experience. | Written summary. |

### Concept 2: Factors involved in entertaining.

### Objective 2: Analysis of the principles of entertaining for the hostess or guest.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Knowledge | |
| The hostess has many responsibilities when entertaining guests. | Read and state responsibilities of the hostess such as conversation introductions, seating, feeling at ease, and providing food needs. | |
| | Observe a hostess at a party. Bring a report to class. | Written report of observation. |
| The successful hostess is able to enjoy the party herself as well as mastering the techniques of giving a party without unreasonable expenditures of time, effort, and money. | Work in groups to study all the jobs necessary to plan, prepare, and serve guests. | Contribution to group work. |
| | Read points on good conversation and proper introductions. | |
| | Suggest topics of conversation to be used at mealtime. Define the meaning of hospitality. | |
| | View film, "How to be a Successful Hostess," Association Films. | Contribution to class discussion. |
| | List the major principles found in film. | |
| The guest has many responsibilities when being entertained. | Read and state responsibilities of the guest such as responding to invitations, bread and butter notes, conversation, and time to arrive and leave. | |
| | Observe a guest at a party. Bring a report to class. | Written report on observations. |
| | Comprehension | |
| Each responsibility requires skill and knowledge on the part of the hostess or guest. | Give examples of how to introduce friends to parents, men, and women. | Introductions. |
| | Establish rules to follow when seating guests. | |
| | List ways of making one feel at ease. | |
| | List jobs to be done at school that may differ from those at home. | Contribution to class discussion. |
| | Summarize responsibilities essential in planning, preparing, and serving guests. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | List in order of preference, topics suitable for mealtime. Give reasons. Discuss effects of good topics of conversation at mealtime. | List of topics. |
| A thoughtful hostess plans for and continues to be conscious of the needs of the guests. | Summarize qualities that make a good hostess. | Written summary or oral report. |
|  | Describe a party where one had a good time. Discuss what made it enjoyable. | Paper and pencil quiz on qualities which make a good hostess. |
|  | Summarize film, "How to be a Successful Hostess." |  |
|  | Give examples of how to write formal and informal invitations. Give examples of how to write acceptance and regrets. | Invitations.<br>Acceptance and regrets. |
|  | Give examples of bread and butter notes. | Notes. |
|  | **Application** |  |
| The use of etiquette techniques affects the climate of the social situation. | Role playing on the responsibilities of hostess at school and home. Include correct conversation, feeling at ease, introductions, seating. | Role playing carrying out correct procedures. |
|  | Divide into groups and plan a supper to be served at school. Write a list of duties to be performed. | Written list of responsibilities. |
|  | Brain storm using topics which make for interesting conversation at mealtime. |  |
|  | Practice conversation when in cafeteria and at home and in the lab. | Self-evaluation of conversations. |
|  | Assist mother with entertaining guests at home. | Written report. Home observation sheets on assisting hostess. |
|  | Practice being a gracious hostess. Bring a written report to class. |  |
|  | Assist with banquet or tea at school. Write a report on hostess. |  |
|  |  | Check list to evaluate performance of responsibilities. |
|  |  | Contribution to group work. |
|  | **Analysis** |  |
| Knowing what to do in social situations will give confidence to the hostess and guest. | Analyze responsibilities necessary when entertaining at school and at home. | Written analysis. |
|  | Recognize changes which may need to be made. |  |
|  | Half of class serve and act as hostesses for supper to second half of class. | Written report by hostesses. |
|  | Analyze results. Next day, change places. | Observation report by guests.<br>Participation in supper. |
|  | Analyze results of banquet or tea in class. | Pupil contribution. |

# ADVANCED CLASSES

## THE IMPORTANCE OF FOOD

### Introductory Statement

The nutritional significance of food is an important aspect of healthy, happy family living. The condition of the body is closely related to the health of the mind and emotions. Thus, it is essential that the physical needs of the body are thoroughly understood.

The study of foods should offer an opportunity to develop in the student an attitude of inquiry, of keen observation, and of intellectual honesty — qualities which are an essential part of a student's equipment for her work either during school or in later years. To arouse her imagination and to stimulate her enthusiasm for the handling of foods, the student needs a background knowledge of food and its functions, the nutritive value of foods, menu planning, and food preparation.

This study must be challenging to make students aware of and to develop an interest in food, in changes due to research and food production, in the evaluation and use of equipment, and management of time, energy, and money. Educational experiences will be most effective if they are identified with the problems the girls will be solving in the future as well as problems in their present family situations. This means problems dealing with the formation of a new family, with working girls, problems that will develop with those girls bound for further education, or problems in the present stage of the family life cycle.

Some of the characteristics of the students in this later adolescent age group include interest in preparation for marriage, depth of understanding, consideration of others, enjoyment in cooking for their friends, and interest in maintaining or achieving desirable weight patterns. In relating these characteristics to this resource unit, depth of understanding and consideration of others are important concepts in planning menus to meet special dietary needs. Nutritional needs within the life cycle should be meaningful to this age group in relation to their interest in preparation for marriage. Their keenness for new ideas and a shift in interests toward food should lend itself to foreign food cooking, gourmet foods, and party planning.

Since this resource unit in foods and nutrition was designed for the senior high school classes as a whole, it is the **responsibility of each teacher** to use the material contained in the unit to fit the needs of her students at their respective grade levels. In some schools there are classes in home economics for each grade level while in others there are a combination of grades. The teacher may, therefore, select those concepts and organize them in a pattern most workable for her particular class arrangement. The workshop participants, however, make the following suggestions:

| | | |
|---|---|---|
| Grade 10: Concept | III-A | Influence of Foods of Other Countries |
| | III-B-2 | Gourmet Cookery |
| | III-B-3 | Outdoor Cookery |
| | III-D | Foods for Special Occasions |
| Grade 11: Concept | I-A | Food Needs of Individuals |
| | II-A | Provision of Food |
| | III-B-1 | Creative Cookery |
| | III-B-2 | Gourmet Foods |
| | III-G | Food Preservation |
| | III-H | Use and Care of Appliances |
| | IV | Careers Related to Food Preparation |
| Grade 12: Concept | I-B | Food Patterns of Individuals and Families |
| | II-B | Food Buying Patterns |
| | III-B-3 | Outdoor Cookery |
| | III-C | Processed Foods |
| | III-E | Management of Resources in Cooking for Two |
| | III-F | Quantity Cooking |

**Unit Objectives:**

I. Evaluation of food patterns from a nutritional standpoint.

  A. Analysis of the physiological and psychological factors that influence food choices of individuals.

  B. Detection of the relationship between food patterns and signs of health in individuals and groups.

II. Evaluation of food purchasing efficiency of an individual.

  A. Appraisal of food production and distribution relative to consumer buying.

  B. Application of principles of buymanship relative to the food dollar.

III. Appraisal of the relationship between planned meals, nutritional and aesthetic value of the meal.

  A. Perception of foods and food customs of other cultures in relation to our own.

  B. Maturity of attitude toward new and/or unusual foods and methods of preparation.

  C. Appraisal of various processed foods in the family meal plan relative to management.

  D. Readiness to make judgments on preparation and service of foods for special occasions.

  E. Appraisal of the importance of management of family resources in the provision of food for two.

  F. Appraisal of food preparation and service for a large group in the home.

  G. Evaluation of food preservation techniques.

  H. Perception of the effect of special equipment on meal planning and preparation.

I. Major Concept: Knowledge of nutrition as a basis for building or improving food patterns.

Broad Objective I: Evaluation of food patterns from a nutritional standpoint.

Broad Generalization: An application of knowledge of the nutrients needed by the body and their sources in available foods *will result in more adequate food patterns.*

Concept A: Factors influencing food needs of individuals.

Objective A: Appraisal of the physiological and psychological factors that influence food choices of individuals.

Generalization: Nutrition can affect how you work by its influence on your physical and mental efficiency.

Concept 1: Effect of psychological factors.

Objective 1: Perception of the effect of the relationship of psychological reactions to food for various individuals.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Some personality traits associated with the state of nutrition of the individual are cheerfulness and poise, interest in others, and emotional stability. | Read about food fads, food fallacies, and food allergies. Which one has most reliable nutritional support?<br>Students report on their food likes and dislikes — why do they dislike or like this food? | |
| Happiness and ideas concerning living are influenced by one's health. | Films: "Fundamentals of Diet," EBF. "The Medicine Man," on food faddism, Sterling Movies, AMA. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| | **Comprehension** | |
| The association with food from the day of birth may make it a means of nonverbal communications: of love or indifference, acceptance or rejection, and other emotional feelings. | Report on fad diets students and families have used, where they obtained them and how satisfactory they were.<br>Discuss the relationship of the nervous system to health.<br>Discuss films. | Reports. |
| | **Application** | |
| Knowledge of the nutritive value of foods and the nutritional needs of your body provides the best basis for making wise choices of foods.<br>Good nutrition requires that one be able to discriminate between fact and fallacy in all fad diets of today.<br>Mental health, attitudes and emotions influence your diet, physical health, and bodily functions. | Discuss the use of these diets, how they would be used, and how nutritionally sound. Why are some of them dangerous to our mental and physical health?<br>Susan is underweight and becomes emotionally disturbed easily. Plan a diet for her.<br>Survey students and adults for reasons why they think yogurt, black strap molasses, and wheat germ are good nutritive foods.<br>Use food value tables to check actual food values. Compare with responses in survey. | |
| | **Analysis** | |
| Examining food fads and fallacies in relation to actual facts may lead to more adequate nutritional practices. | From clipped diets in magazines, or papers, write a paper analyzing them from a physical and emotional health standpoint. | Written paper. |
| | Watch for TV or magazine ads that link a product with a well-known celebrity or cartoon favorites. Are claims accurate, misleading, incomplete? | |
| | Develop criteria for evaluating whether or not authors of articles on nutrition are reputable representatives of their field. | Criteria developed. |
| | **Synthesis** | |
| Food habits and preferences are a product of complex interaction among physiological and psychological satisfactions associated with food, belief about foods, and economic resources. | Role-play: "Folklore" — to show various notions about food such as pasteurization destroys food value; fish is brain food; dark bread is better than white. Bring in scientific findings about these notions. One may include "old wives tales" such as oranges cause cancer; pickles eaten with milk sour the milk. | |

**Concept 2: Effect of physiological factors.**

**Objective 2: Perception of the role of nutrition in body performance and structure.**

**Concept a: Utilization of nutrients.**

**Objective a: Formulation of a nutritionally adequate diet.**

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| | **Knowledge** | |
| When you are physically well you have more cheerful feelings toward your associates and enjoy your school work as well as outside activities. Foods lose their identity in | Define: physiological, digestion, utilization of nutrients | |
| | Pretest on nutrients and functions — then elaborate according to needs of the class. | Pretest. |
| | Film: "Digestion of Our Bodies," Coronet. | |

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| the metabolic process. | Demonstration by chemistry, biology teacher, or a good student with synthetic digestive juices to show breakdown of food during digestion. | |
| | Read references on malnutrition. | |
| | **Comprehension** | |
| | Discuss snacks and their effect on health, figure, and relationship with your family at mealtime. | Discussion of the effect of snacks. |
| | List 10 physical indications of good health. Where does each student rate with this list? | |
| | Discuss the film. | |
| | Students find pictures that represent malnutrition — place on bulletin board. | |
| | Discuss the bulletin board, "Eat Better, Feel Better, Look Better." | |
| | **Application** | |
| The diet one eats affects physical efficiency and appearance. | Survey the appearance problems of the class which can be improved or changed by diet, such as skin eruptions, paleness, drab and dull hair, overweight, and lack of strength. | |
| | Plan foods which should be especially included in the diet to overcome these difficulties. | |
| If the normal human body obtains adequate nutrients to supply the requirements of various body functions, it tends to be well-nourished and free from deficiency diseases. | Peggy Barkley enjoys picnics and hiking; however, she doesn't have the energy to keep pace with her friends. Plan meals for three days that will help her acquire necessary vitality. | |
| | Prepare a list of danger signals that warn of malnutrition or "hidden hunger" such as poor posture. Discuss the danger signals. What does one do to insure family's good nutrition? | Meal plans. |
| | **Analysis** | |
| Good dietary habits established early and carried to adult life will help prevent related health problems. | Make a personal analysis of your snack habits. What do you eat, when, why? Decide on future policy, using ideas that have come from class discussion of snacks. | Personal analysis. |
| Low caloric food selection and small servings will aid the individual with a weight problem. | Mary Jane's doctor says she is anemic. Make a list of foods she should eat to overcome her deficiency. Committees investigate what nutrients contribute to the following factors: underweight, overweight, poor teeth, tiredness, nervousness, lack of appetite, overactiveness, paleness. | |
| | Report to class. | |
| | **Synthesis** | |
| | Plan a diet suited to your needs based on your activities and physical structure. Include school lunch and snacks. | Diet plan. |
| | Students make list of nutritionally beneficial snacks. | |

**Concept b: Energy balance.**

**Objective b: Application of criteria for a balanced meal that will provide energy to maintain daily activities.**

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| Calories in foods are a measure of the amount of energy supplied to the individual by his diet. A calorie is the amount of heat necessary to raise one kilogram of water one degree Centigrade.<br>Energy supply is dependent upon caloric intake. | **Knowledge**<br>Read about the place of fats, carbohydrates, and proteins in supplying energy and gaining and reducing.<br>Study graphs illustrating the effects of a reducing and gaining weight diet.<br>Read about calories and caloric requirements for different people and how energy needs are measured. Students observe a demonstration by the teacher doing a simple task.<br>Check the chart and determine the number of calories required for the activity. | |
| Energy from food is used to do muscular work, to produce body heat, to support growth of the body or the production of new tissue, and to maintain the functioning of the vital organs.<br>The sources of energy are fat, carbohydrates, and protein.<br>Carbohydrate and protein supply the same amount of energy for equal weights, or 4 Cal/gram. | **Comprehension**<br>Discuss how to meet energy needs through the intake of carbohydrates, protein, and fats.<br>Discuss relation of calories to gaining and reducing.<br>Answer the following:<br>Which three nutrient groups supply calories; how do these sources compare in caloric value? Name common foods which are high in carbohydrates; fats; protein. Give several reasons why fat in reasonable quantities is desirable in one's diet. Name common foods which are high in total calories, medium in total calories, low in calories.<br>Discuss caloric needs according to individual's age, sex, temperature, type and amount of exercise, and the proportion of non-fat weight of the body.<br>What are the comparative energy needs as expressed in calories, by sex, age, and degree of physical activity?<br>What is the difference between basal metabolism and general metabolism? | |
| Food energy value increases as the amount of fat in the diet increases since fats provide two and one-fourth times as many calories as the same weight of carbohydrates and protein.<br>Food energy value of the diet depends on fats, carbohydrates, and protein since their end products release energy as they are broken down in the body cells. | **Application**<br>From a collection of pictures or food models of desserts, classify according to type:<br>Fruit — raw or cooked<br>Protein — milk, eggs, or gelatin<br>High carbohydrates and fat — butter cakes or cookies<br>Combination — fruit or cream pies, sponge, or angel food cakes<br>Compare nutritive and caloric values of desserts of each type. Which kinds would be best for those trying to lose weight, gain weight?<br>Caloric problems. May use examples from nutrition texts.<br>Laboratory experience to find the caloric value of certain foods.<br>Keep an exact record of activities for 24 hours.<br>Using a table of composition determine the number of calories needed for day's activities. | Quiz on terms. Individual projects — plan menus for three days to meet the caloric requirements and nutrient needs of family members.<br>Plan a day's menus with 1500 calorie diets for a high school girl. Add additional foods to provide a 1600, 1700, 1800 calorie diet. |

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| Good dietary habits established early and carried to adult life help prevent related health problems. | **Analysis**<br>Keep a careful record of everything eaten for three days, and determine calories eaten. Compare with caloric requirements and determine whether weight will be gained or lost or maintained. | Joan is planning weight control. Write a paper explaining why she should eat three meals a day and select foods from each basic group. |
| | Analyze the nutritive and caloric values of snacks and refreshments eaten over a three day period. | |
| | Which ones contributed to daily food requirements and which ones were mostly calories? | |
| | Individual project — for one week have students determine the caloric value in their menus. Relate caloric intake to energy expenditure. | |
| | **Synthesis**<br>Determination of where modifications in diet are necessary from above group. | |
| | Modify diet according to need of gaining, losing, or maintaining weight. | |
| | Plan menus for three days that will meet Recommended Daily Allowance and caloric requirements of students. | |
| | **Evaluation**<br>Plan a day's menu according to family's activities, caloric requirements, and nutritional needs. | |
| | In groups plan a one-day menu for a teen-age athlete, a laborer, a grade school child, and a teenage girl. | Check for Basic 4 and nutrients present. |

**Concept 3: Health problems of family members requiring special dietary attention.**

**Objective 3: Formulation of menus to fit special individual dietary needs as well as the nutritional needs of the family.**

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| Many nutritious and delicious sugar-free foods are available for the diabetic and his family. Diets containing low cholesterol foods are considered more healthful than high cholesteral diets. | **Knowledge**<br>Study trip to diet kitchen to observe diets being prepared for various purposes.<br>Visit homes for the aged or invite someone who operates such a home to speak about dietary problems of aged. | |
| Bland and easily digested foods are desirable for family members although the family menu needs other food for texture and variety. | Collect and arrange a display of special dietary foods. Tag each food with a card indicating the name of the food and type of illness(es) or disease(s) for which the food is helpful. Experiment with nonnutritive sweeteners or salt substitutes. | |
| Many nutritional needs of individuals with health problems are the same as those in normal health. | Studying individually or in pairs use the textbook and reference materials available to gather information for a report on the nutritional needs of family members with special health problems. | |
| Persons requiring a rest diet require easily digested bland food. | | |

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| | **Comprehension** | |
| An individual with a diabetic condition restricts his sugar intake or refrains from use of sugar. | Prepare a report on the nutritional needs of family members with special health problems, such as ulcers, heart trouble, diabetes, high blood pressure. | Special reports. |
| | Discuss soft, light, and liquid diet. | |
| | Discuss food requirements for older people and how to meet these requirements economically and make attractive enough to tempt appetite. | |
| | **Application** | |
| Carbohydrate and liquid foods may be used as an accompaniment to low calorie foods for family members who require a higher calorie intake. | Using the information obtained in the report plan a dinner menu to fit the dietary needs of an individual health problem and adapt the family dinner menu to it. | The menu planned to meet dietary needs of chronic health problems and the menu adapted for the family meal. |
| | Plan menus for one day — adjust for milk-free diet, wheat-free diet. | |
| A special type of diet can be incorporated into the family menu with careful planning. | Investigate the requirements for employment as a dietician and report to class. | |
| | Interview people who have been ill or are on a special diet — report to class. | |
| Consideration of special nutritional needs of family members should increase an appreciation of one's own health, as well as develop a sensitivity to the health problems of others. | Plan, prepare, and serve a meal for a person with special dietary needs. | |
| | Using a good general menu, convert it to a light, soft, and liquid diet. | |
| | Show the relationship of the dietary needs of an individual with a health problem and the family nutritional needs in graph form analyzing the important nutrients. | Prepared graph of comparable nutritional needs. |
| | **Synthesis** | |
| In some cases, incorporating special dietary needs into family menus will help promote optimum health for all family members. | Choose one level in the life cycle or one health problem and plan a day's meals. | Set of menus for a day. |
| | Consider the individual dietary needs, the Basic 4, and all that constitutes an attractive, well-planned set of menus. | Keep record of intake and analyze. Test to evaluate general dietary needs during various stages in the life cycle and needs of individuals with special health problems. |

Concept B: Food patterns of individuals and families.

Objective B: Comparison of the relationship between food patterns and signs of health in individuals and groups.

Generalization: The food patterns of individuals and families have an effect on the health, longevity, and general well-being of the individual.

Concept 1: Social and economic influences.

Objective 1: Appraisal of the effect of social and economic influences on family food patterns.

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| | **Knowledge** | |
| Food patterns of families are the combined eating habits of individual family members in response to social | Read references on "Basic Food Plan." | Quiz on Basic 4. |
| | Construct a Basic 4 mobile to review what is necessary | |

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| **and cultural pressures.** | Read agriculture bulletins on food budgets. | Discuss. |
| | Bulletin board display of newspaper pictures of people showing malnutrition — "Hidden Hunger." | |
| | Guest speaker from welfare department to talk to groups about socio-economic levels of population and their eating habits. | |
| | View film, "Consumption of Food," EBF. | |
| | Book reports — books dealing with social economic problems of nations. Example: Dr. Dooley and "Crossroads." | |
| | Invite people who have had first-hand experience with other nations through the IFYE, Peace Corps, or similar programs to speak about the importance of food to peace in the world. | |
| **The world's need for food and good nutrition is of concern to all nations.** | Obtain illustrations and pamphlets from UNICEF, WHO, UNESCO, CARE, AND Anti-Poverty Program for efforts made to cope with nutritional problems the world over. | |
| | **Comprehension** | |
| | Discuss the United States "Food for Peace" program inaugurated in 1960 and the Anti-Poverty Bill passed in 1964. | |
| | Ask U.S. Congressman or Senator from the state to speak on Public Law 480 (1954) which provides U.S. surplus foods to other countries. | |
| | Discuss the use of food groups as a quick way of planning or recognizing an adequate daily diet. | |
| | Discuss problems encountered in the acceptance of these new foods by homemakers of other countries. | |
| | Have an individual or group committee review one of the following books; discuss "food customs" and the lack of food.<br>*The Bible* — story of Joseph and his brothers, plus others.<br>*The Good Earth* by Pearl Buck<br>*Marjorie Morningstar* by Herman Wouk<br>*Porgy and Bess* by George and Ira Gershwin | |
| | Bring such a book to class and discuss the differences in the lives of its characters that good diet or different customs might have made.<br>Film: "Production of Foods," EBF<br>Film: "Distribution of Foods," EBF<br>Film: "Food and People," EBF<br>followed by discussion of films. | |
| | Plan and arrange a bulletin board with a "Care" package theme. | |
| | Divide into three working groups for research work. Each group choose one of the following topics:<br>1. Psychology of eating<br>2. Past records of man's attitude toward food<br>3. Social factors that influence the choice of food | Reports on research. |

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| | Follow by discussion. | |
| The food pattern of a family reflects the socio-economic level of the family. | Discussion of report by guest speaker from welfare department.<br>Consider food stamp plan and its use.<br>Devise ways for a person "eating out" to get well-balanced menus; that is, in cafeterias. | |
| | **Application** | |
| Provision of food in areas of scarcity affects the physical, economic, and psychological status of people and carries political implications. | Study agricultural methods, food customs and taboos, and food preparation methods of a country known for its dietary deficiencies. Use maps, charts, pictures, and typical foods to illustrate these customs. | |
| | Students prepare a bulletin board showing areas of the world with inadequate food. Special research project to learn why the problem exists, what is being done, or what could be done. | Special research problem. |
| | **Analysis—Synthesis—Evaluation** | |
| A thorough knowledge of the Basic 4 plus economy foods may have an influence on the food pattern of the family. | Analyze nutritional values of typical menus of low income families.<br>Devise a plan to aid or educate a population in planning nutritionally sound menus.<br>Evaluate nutritive value of food sent to other countries and how it supplements the diet of impoverished countries. | |
| The adequacy of the food supply of people in other parts of the world has an effect upon people everywhere. | Set up a typical United Nations General Assembly session to report on nutritional problems of various countries and pass resolutions outlining ways to relieve these problems. | |

### Concept 2: Cultural, racial, and religious influences.

### Objective 2: Evaluation of the effects of cultural influences on today's food patterns.

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| | **Knowledge—Comprehension** | |
| Certain religious and racial groups, regions, and cultures have food patterns which are passed on from generation to generation. | Invite an exchange student to tell of eating customs in his country.<br>Discuss film, "Consumption of Foods," EBF.<br>Pool "ideas" of students who have traveled abroad on eating customs of various nations.<br>Provide a browsing center in the department or school library for reading materials on food habits and customs of other countries. | |
| Nutritionally inadequate diets resulting from ignorance and long established food customs create serious nutritional deficiencies. | Arrange bulletin board display of food or people from another culture. Study food habits and customs of some other countries. Discuss similarities and differences of food practices, such as kinds of foods served, number of meals per day, methods of cooking, ways of serving, and table etiquette.<br>Summarize the characteristics of foods from countries that make them distinctive.<br>Discuss by buzz groups "the possibility of a job | |

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|  | change transplanting a family area of strong culture group."<br>Example: Moslem, Japanese, Indian, Mexican, European, Jewish, Eskimo, Hawaiian. |  |
|  | **Application** |  |
| The food patterns of other cultures can provide nutritional requirements of the family. | Form working groups to study food habits of several nationalities of people. Consider their climate, altitude, nearness to a large body of water, and general occupation. Present the results to class.<br>Divide the groups to plan authentic menus of different nationalities, races, or cultures.<br>Study one's own food habits and decide what governs choice of foods. Consider the following: Regional food habits, national traditions, seasonal influence, religious influences. |  |
| Religion has an influence on food choices. | Panel discussion on influence of religions on foods. | Panel discussion. |
|  | Students write a summary of the panel. | Written summary. |
|  | Clergymen speak to class on food practices of their religion. |  |
|  | Prepare a week's menus for family of four utilizing some typically cultural foods. | Evaluate menus prepared. |
|  | Devise a plan for an American exchange student living or visiting in a foreign country to supplement his diet to make it nutritionally sound. |  |
|  | **Analysis** |  |
| The food patterns of other cultures may be utilized to provide the necessary nutritional requirements of the family today. Adequate nutrition can be attained with many combinations of foods commonly available throughout the world. | Analyze authentic menus of different nationality groups for nutritional requirements. |  |
|  | Evaluate the results of committee reports on nationality food habits. Research one of the following:<br>1. Contributions the U.S. has made to the setting of standards for nutritional needs.<br>2. Evidence of nutritional deficiencies in the U.S.<br>3. Community and national agencies working toward better standards of nutrition.<br>4. Changes in American dietary habits in recent years. | Analysis of committee reports. |
|  | Select a food common to families in your locality.<br>Analyze it. Does it contribute to Basic 4 requirements? Decide what improvements upon existing local dietary patterns could be made.<br>Discuss the deficiency diseases of various regions and the effect upon the health of the people in those regions.<br>On a bulletin board show typical meals consumed by a family in a particular region. Add foods to this that would complete the Basic 4 using foods that are commonly found in that region. |  |

**Concept 3: Relationship of food patterns to health.**

**Objective 3: Formulation of suitable, usable, and adequate food patterns.**

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|  | **Knowledge** |  |
| A basic food plan provides the nutritional requirements of each individual. | Read about the ways nutritional needs vary among individuals and what makes the needs vary.<br>Question-answer discussion on varying nutritional needs and what makes them vary.<br>View filmstrip, "Breakfast for B. J.," Pillsbury, on effects of skipping breakfast.<br>Discussion of how the filmstrip applies to other meals. |  |
|  | **Comprehension** |  |
|  | Discussion of Recommended Daily Allowance and review of energy requirements for individuals.<br>Discussion of size of usual servings and how they compare with Recommended Daily Allowance and the energy requirements.<br>Discuss the essentials of meal planning in relation to good nutrition and appetite. | Quiz on varying needs of family members and on what makes the needs vary. |
|  | **Application** |  |
| The basic food pattern varies to meet changing conditions. The amount and kind of nutrients needed by individuals vary and are interrelated processes influenced by heredity, age, size, sex, activity, climate, and physical and emotional state. | Class figures total caloric needs for a specified family. The figure varying allowances and amounts of substances required for each member. | Assignments handed in and graded. |
|  | Class figures own Recommended Daily Allowance of specified foods. |  |
|  | Class figures menus to fit specific families with amounts for each person.<br>Have students prepare bulletin board, "Let Planning Chase the Menu Blues Away."<br>Make a food plan ahead of time for your school lunches so you know what nutrients are provided. | Menus developed. |
|  | **Application—Synthesis—Evaluation** |  |
| Food patterns can be adapted to meet the necessary nutritional requirements regardless of socio-economic level. | Divide class into groups to evaluate prepared or typed menus.<br>Then discuss one good and one poor menu from each group.<br>From previous students' food records, evaluate the day's menu to see if they meet requirements. |  |
| The attitude and information of the meal planner toward food and nutrition has an influence upon the nutritional adequacy of the meal served. | Individual projects to determine nutrient content of foods eaten over one week period. Evaluate nutrient content.<br>Improve last week's menu by making modifications where necessary.<br>Group project to plan menus to meet the Recommended Daily Allowance for various groups:<br>babies, grade school children, teen-age girls, athletes, pregnant women, adults. | **Evaluation:**<br>Plan menus for a week for a family of four that would meet basic needs of each individual member. (To be graded). |

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|  | Display magazines and other guides available to the consumer which deal with suggestions for selection of adequate diets. |  |
|  | Evaluate for reliability. |  |

**II. Major Concept:** Importance of food purchasing practices.

**Broad Objective II:** Evaluation of food purchasing efficiency of an individual or a family.

**Broad Generalization:** Informed consumers making rational and discriminating choices in the purchase of food can influence the functioning of the market to serve consumer interests and improve the effective use of resources.

**Concept A:** Provision of food.

**Objective A:** Appraisal of food production and distribution in relation to consumer buying.

**Generalization:** Technological growth and current sociological trends have an effect on developments in food processing, acceptance of a variety of food forms, and changes in patterns of consumption.

**Concept 1:** Food production and distribution.

**Objective 1:** Analysis of modern food processing and distribution methods in relation to individual situations.

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|  | **Knowledge** |  |
| Understanding food processing and distribution methods is important in being a well-informed consumer. | Study trip to dairy, bakery, ice-cream and butter packing plant, turkey processing, cannery. |  |
|  | Compile a list of processing procedures and transportation experiences that are included in the retail cost of a particular food, such as frozen packaged food. | Hand in for evaluation. |
|  | Display of different forms of milk with costs of each. |  |
|  | **Comprehension** |  |
| The consumer price of food products depends upon the availability of the food, the amount of processing, and the demand of the consumer. | Discussion of study trip to commercial plant with implications to the consumer. |  |
|  | Study local and state regulations relating to the production and sale of milk. What improvement could be made? | Quiz on local and state regulations. |
| As more services are built into foods, the control of industry over the kinds and quality of food increases and that of the home decreases. |  |  |
|  | **Application** |  |
|  | Compare the cost of the following forms of milk — fresh, homogenized, evaporated, skim, dried. |  |
| Changes in agricultural developments and in size and composition of population has an effect upon per capita supply, distribution, and consumption of food. When there is a scarcity of available land and an increase in population density, the discovery and use of new sources of | Students bring to class current magazine and newspaper articles about new technological developments for bulletin board display and discussion. |  |
|  | Testing lab of synthetic foods. |  |
|  | Magazine articles on research about use of sea life. |  |

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| food become increasingly important. | | |
| | **Analysis** | |
| As the population of the world and the U.S. increases or "explodes," new methods of production, and new sources of food may influence the buying practices of the consumer. | Write a paper on what effect this will have for homemakers in the future.<br>Analyze the cost/serving of different forms of particular food, such as forms of milk. | Evaluation of this paper. |

## Concept 2: New developments in food processing.

## Objective 2: Perception of recent commercial developments in food processing.

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| | **Knowledge** | |
| | Read about new ways to process foods.<br>View filmstrips, "Why of Food Additives" and "Food Through the Ages," (Manufacture Chemists Assoc.). | |
| A food additive is a substance or mixture of substances other than a basic foodstuff, which is present in food as a result of any aspect of production, processing, storage, or packaging. | Define: Food additives — intentional.<br>List and define incidental chemical names as food in mixes, prepared products.<br>Make a study trip to supermarket, bakery, dairy, to learn where additives are used.<br>Study trip to school cafeterias to investigate government surplus foods and how they are processed. | |
| | **Comprehension** | |
| Physical processes commonly employed to alter the nature of food include: Heating by conduction, radiation, internal generation, cooling, evaporating, dialyzing, dissolving, emulsifying, crystallizing, agitating, fractionation. | Assign students reports on recent research in electronic processing, use of antibiotics, radiation, dehydration by freezing.<br>Discuss filmstrips and list types of additives.<br>Discuss value of food additives found in processed food. Are they always beneficial? What is the purpose in using? | |
| | Identify food additives used in processed food products: Dry mixes, refrigerated doughs, canned foods. | Evaluate purposes and functions of additives in these foods. |
| | **Application** | |
| Food additives affect foods by enhancing the flavors, maintaining appearance, consistency, palatability, and wholesomeness of foods, improving nutritive value, and insuring a desired and characteristic color. | From display of like foods, compare ingredients.<br>Discuss how these ingredients would affect flavor, cost, keeping quality.<br>Read labels and wrappers of foods and circle ingredients that are additives, classifying their functions, such as:<br>To enrich foods<br>To improve flavor, texture, color<br>To retard spoilage and deterioration | |
| Knowledge of the significant chemical constituents and physical systems present, and of the principles governing the physical and chemical processes used, contributes to understanding and control of the physical | What is their chemical nature and desirability?<br>Teacher and pupils demonstrate slicing of fresh fruit such as apples, peaches, pear, or bananas. Experiment by leaving some fruit exposed to the air and add ascorbic acid or lemon juice to the rest. Discuss | Demonstration. |

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| and chemical changes that occur during food processing and preparation. | the causes of oxidation and how to delay its action in certain food products. | |
| | **Analysis** | |
| Food additives can be derived from foods such as corn — or can be created by food scientists in answer to special problems. | Demonstrate and analyze the suggestions given in "User's Guide" for *Food Additives.* | |
| Technological developments in the food industry and the continual change in the nature of food and food products available to the consumer has an effect on the procedures in food handling, storage, and preparation. | | |
| | **Synthesis** | |
| Technological growth and current sociological trends promote developments in food processing, acceptance of a variety of food forms, and changes in patterns of consumption. | Summarize ways additives improve foods. Discuss how food additives have helped to standardize ingredients, such as:<br>Milk and peanut butter — homogenized<br>Shortening — rancid free<br>Salt — free flowing<br>Evaporated milk — uniform texture, flavor<br>Coconut — moist | Discussion. |
| | Arrange displays to show that the use of various additives such as flavorings, herbs, emulsifiers, stabilizers improve nutritive value. | Displays. |

## Concept 3: Consumer protection measures.

## Objective 3: Appraisal of consumer protection practices in relation to food products available.

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| | **Knowledge** | |
| Legal protection is a means by which the government guides the production, processing, handling, and storage of food in order to safeguard it for human consumption. | Assign a student to study each agency involved with consumer interests. | Written report devoted to operations of assigned agency. |
| | **Comprehension** | |
| Consumer protection is a general term applicable to provisions which legally safeguard the interests of the food processor and consumer. | From a food package display, illustrate examples of existing practices. | Evaluate labels of:<br>Several types of novelty foods and imported foods.<br>Select examples of effective packaging. |
| A service of government and industry is to clarify commercial food practices in order to protect consumer interest. | Recognize types and methods of packaging used for commercial food distribution. | |
| | On browsing table, display magazine of a testing bureau. | |
| Consumer protection is the responsibility of government | Report by students on public and private agencies involved with consumer interests: | |

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| and private agencies. Alleged violations that affect the integrity of the commercial food industry are dispersed by mass media. | Federal Food and Drug Administration<br>Better Business Bureau Consumers' Union<br>Bring to class for discussion articles by "Watch Dog" in *Farmer Magazine*. | |
| Public exposure to consumer information is conveyed by:<br>Newspapers<br>Magazines<br>Television<br>Special publications | Review newspaper and magazine articles about food processing and packaging.<br>Interpret methods used in television advertising that are related to consumer protection.<br>Read and discuss comparative studies of commercial foods in consumer service magazines. | Oral or written evaluation: Summarize the consumer protection practices that are correct and incorrect according to mass media. |
| | **Application** | |
| Legal protection enforced by federal, state, and local agencies protects the consumer food supply. Industries usually conform to labeling regulations that determine standards of identity, actual weights, and which prohibit false advertising. | Display and identify examples of legal packaging and labeling practices used in commercial food products.<br>Brain-storm session of situation in which students have been persuaded to buy — with realization of motives or hidden persuaders. | Compare differences in container contents of like products packaged in different containers. |
| | Discover and display food items that exemplify the claimed violations in labeling and packaging.<br>Discuss responsibilities of consumer relative to certain products which do not meet standards. | Evaluate examples of claimed deceptive packaging. |
| Packaging of commercial food products is designed to appeal to the consumer, protect the product, and provide practical storage for unused portions. | | |
| Complete listing of food additives is legally required. | | |
| Federal, state, and local agencies work toward the protection and guidance of consumers in their purchase of certain foods by certifying wholesomeness and freedom from adulteration, by establishing standards of identity, by requiring truthful labeling, and by prohibiting false statements in advertising. The support and cooperation of informed citizens increase the efficiency of government and private agencies in improving the quality, safety, and quantity of the food supply. | | |
| | **Analysis** | |
| The realization of future consumer protection will be determined by the validity of needs that exist for federal control of food processing. | Invite a representative of a local health or federal food agency to interpret proposed federal legislation. | |
| Consumer service magazines can be objective or contain limited interpretation. | Analyze published statements by the food industry expressing its consumer protection viewpoint.<br>Analyze trends of federal involvement in control of<br>Packaging | |

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| Interpretation of future proposals for consumer protection will be increased by accurate understanding of present regulations. | Pricing<br>Quality standards<br>**Synthesis**<br>Design labels and advertising for creative foods, complying with existing legal regulations and proposed revisions in food labeling and packaging. | Evaluation of label and advertising assignment by class. |
| Discrimination of honest application of protective measures will determine the level of consumer interpretation of these measures.<br>Valid practices used by commercial food industry are a result of legal regulations. | **Evaluation**<br>Evaluate the information exposed through mass media with proposed revision in consumer protection legislation.<br>a. Net weights referring to "jumbo," "giant," for example.<br>b. "Cents off."<br>c. Standardized weights, package sizes, shapes, and dimensions.<br>d. Designation of number of servings. | Commercial food industry magazines provide means for evaluation of trends. |
| Safety of food is determined by the qualities of the natural food, by procedures used in the production and processing of food, and by the sanitary measures used in handling and storing it in the market and in the home. | Evaluate some of the new synthetic food products using the information from the preceding classes. Show pictures of new fibers of spun protein. | |
| The results of testing by federal agencies may determine whether the addition to a food of certain nutrients or other components serves a useful purpose and will result in definitions and regulations under which such additives may be used. | | |

Concept B: Food buying patterns of families.

Objective B: Application of the criteria of buymanship relative to the food dollar.

Generalization: The development of an efficient food buying plan implies a consideration of individual family needs, nutritional, social, psychological, in relation to food values, food availability, and price levels.

Concept 1: Food budgeting. See management of the family income — Family Relations Resource Unit, Grade 12.

Objective 1: Judgment of the distribution of the family's income for food.

Concept 2: Meal planning based on family income.

Objective 2: Application of criteria of the family food plan in relation to family income with consideration for nutrition, aesthetic qualities, and family preferences.

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| Each family has its own plan for spending the food dollar.<br>Planning is important to fit | **Knowledge**<br>Study assigned sections of textbooks and reference books, government publications, magazine articles to become familiar with food buying principles and practices of families. | Give short objective type tests to cover basic knowledge of buymanship principles. |

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| the family budget to nutritious meals.<br>The resources available for meeting personal and family food needs include personal capacities, available goods and services, and purchasing power. | Take study trips to a number of food stores of different types, chain, supermarket, independent, to inspect foods on display and have trained personnel point out some factors that have an effect on price and value.<br>Study buymanship principles as portrayed in filmstrips, posters, movies, and other visual aids.<br>Invite an expert from the local branch of the Department of Agriculture to give a talk on consumer buying. | Engage students in oral discussion of the factors that involve differences in buying habits in different families. |
| | Visit a grocery store. Assign each group of girls a specific food classification. | Figure costs per serving. |
| | Invite the high school teacher of economics to give her views of the buying habits of families. | |
| | Interview the following people to get variations in applying buying habits:<br>1. Own parents<br>2. Homemakers of different income levels<br>3. Homemakers with different size families<br>4. Employed and unemployed homemakers<br>5. Older people living independently to discover any adaptations they have made to meet present needs.<br>6. Newly married graduates.<br>7. Working girls or boys with own apartments.<br>8. Young couple with first child.<br>9. Welfare department and/or social worker.<br>Interviews and talks could be taped so that participants would not have to come to actual classroom and the talks could be used later for discussion. | Questionnaire. |
| | **Comprehension** | |
| | Hold informal discussions with experts in food buying during scheduled study trips.<br>Hold informal discussions with guest lecturers following the presentation.<br>Present to class a review of some particular aspect of assigned study materials on food buying.<br>Hold buzz sessions following a movie or slides portraying buymanship principles.<br>Class members present food buying principles learned.<br>Buzz session — list as many principles of food purchasing as possible in an allotted time.<br>Discuss how leftovers can become "planned-overs." How does this help the food budget? How does this help time manegement? | Have students respond orally to questions on food buying concepts that require classification. This might take the form of a "question box" in which individual students pick a question and explain the concepts involved to the class. The teacher might have one or several contributions in the box to insure coverage of essential points. |
| | **Application** | |
| The development of an efficient food buying plan implies a consideration of individual family needs, nu- | Set up a showcase in which the principles of buymanship would be displayed.<br>Plan a bulletin board for the whole school to view the principles of buymanship. | Set up a hypothetical family situation and have students list food buying principles found to be characteristic of |

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| tritional, social, psychological, in relation to food values, availability of particular foods and price levels. | Prepare a bulletin board display adapted for several family income groups.<br>Write an article for the school paper telling about the principles of food buying.<br>Present a skit to the home economics club portraying the principles of buymanship. | the family type. |
| The choice of which type food to use in providing meals for the family depends upon the quantity of each resource available, the cost of the alternatives and their effectiveness in producing the desired result, and the ability of the user (s) to employ the resources for the purpose desired. | Give a demonstration of food buying principles to the parents at a PTA meeting.<br>Draw conclusions from talks given by employed and unemployed homemakers, and professional people.<br>Role-playing — Have students take the parts of homemakers from low, middle, and high income groups to display their food buying principles.<br>Have a *This is Your Life* program, and work in food buying principles of the young married couple, the family with children, and the declining family. | |
| A food market order provides the amount of various foods needed grouped by Basic 4 or by layout of market place. | Plan menus for a week. Make out a grocery order for them. Price least expensive form or brand and most expensive form or brand at the grocery store. | Total the two lists to use for later discussion. |
| | Check newspaper ads for specials. Check news articles for plentiful foods for the week. Plan several dinner menus with these helps. | Score for Basic 4 and variety. |
| | **Analysis** | |
| If people practice good buymanship principles, they will derive greater value from the money they spend for food. | Try to pick out from a variety of visual presentations some points that either reinforce or contradict the buying principles so far considered.<br>Make a list of all the buying services that can affect food cost. | List some hypothetical buying situations and have students suggest an evaluation of procedures in the light of the principles they have studied. |
| The various prices of food may be a reflection of market availability or the form in which it is sold. | Scrutinize the buying practices of your family to try to detect areas that require improvement.<br>Have a discussion with parents to re-examine the points singled out for improvement. | Talk with parents to discover whether students are showing increasing interest in the consumer problems of the home. |
| While a competent manager can reduce the amounts of money needed for food there is a practical minimum below which it becomes increasingly difficult to acquire adequate nutrition to provide culturally accepted variety in food. | Examine menus of different cost levels to clarify factors that involve cost differences.<br>Try to identify elements of difference in the food spending of large and small families on a given income level.<br>Analyze the factors of difference in buying costs and principles that are associated with interviews conducted.<br>Compare different brands in one food for flavor, use, appearance, and cost. | |
| | Discuss difference in price of a week's market order. Guide students to decide what brands or forms would be most satisfactory for their purpose.<br>Compare prices on identical items in stores that give trading stamps and those that don't. Draw conclusions. | Hand in market order with forms, brand, and price decided on. Explain decisions. |
| | **Synthesis** | |
| The amount of money that is needed to buy food for the | Give each group of girls a hypothetical family, giving age of each, hobby interest, income of family. | Score for Basic 4 and variety as well as costs. |

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| family may be influenced by location of home, number in the family, and their ages, as well as sex and the kind of activities they are engaged in. | and occupations of each. Work out menus for a week that fit this income level. | |
| Family food costs will vary with the size and composition of the family, the value they place on food, and the resources available. | List principles important for each. Divide class into groups of six to discuss and role-play factors that influence buying practices in each of these groups:<br>1. Career girl living alone<br>2. Young married couple<br>3. Couple on limited budget<br>4. A large family<br>5. A working mother<br>6. A new baby with no help at home | Assign an essay in which students will describe how consumer knowledge, especially in the food area, has helped to solve some special home problems. |
| | Using a similar menu, have the students vary it for low, medium, and high cost. | |
| | Students using their ideas for "planned-overs" demonstrate to class. | Use score card for demonstration. |
| | **Evaluation**<br>Judge the above menus of the hypothetical family for Basic 4 and variety as well as cost level.<br>For the role-playing groups, plan menus for each situation and evaluate as to nutritional requirement, time and skill required for preparation and the aesthetic value. | |
| | Do a comparative study in a selected area of food buying for a specific period, at least one month, before and after adoption of a change in a particular buying practice. Note the value of this change in terms of reduced costs. | Using a variety of case situations, allow students to interpret the problems involved, relate them to particular buying practices, and make judgments as to whether the problems have any bearing on buying practices. |
| | Study a variety of menus which are balanced nutritionally but high in cost to see possibilities for substituting less expensive items without affecting the nutritional value. Proceed to an evaluation of the statement: "The cost of food has no essential relationship to its nutritional value." | Where feasible, possible changes in buying practices may be suggested. |

III. Major Concept: Preparation and service of meals using special foods.

Broad Objective III: Appraisal of the relationship between planned meals and nutritional and aesthetic value of the meal.

Broad Generalization: Participation in planning, preparing, and serving meals can be a source of pleasure and satisfaction and provide an opportunity for aesthetic and creative expression.

Concept A: Influence of foods of others cultures.

Objective A: Perception of foods and food customs of other cultures in relation to our own.

Generalization: The role of food as a socializer, as an aid to breaking down communication barriers, and as a symbol of hospitality and friendliness can provide a unique opportunity to understand other cultures.

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| | **Knowledge** | |
| The kinds of foods, the way they are prepared, their grouping in meals, and even | Find out from parents or friends from another country or locality what the favorite or "typical" foods of that area are. | |

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| **the manner in which they are served and eaten characterize the food customs that are unique to a country or region.** | Have girls tell about their family "Holiday Traditions" which may have originated from another country or culture. | |
| | Invite foreign students, AFS, IFYE, Peace Corps, missionary or others, to describe typical foods and eating habits of another country, perhaps using slides. | |
| | Have a foreign student demonstrate the cooking procedure and method of serving a meal typical of that culture. | |
| | Read text, magazine articles, references, and cookbooks about foods from another culture. | |
| | View film or filmstrip on Foreign Food Cookery. | |
| | As a field trip, visit a restaurant specializing in a type of food and service unique to a country or area. | Write a paper describing reaction to meal. |
| | Watch for food patterns and familiar foods and methods of service, also special utensils. | |
| | Discussion of readings of text and articles to bring out factors of geography. Bring to class a sample of a "special food" commonly made at home and have a taste session. | |
| | Panel discussion as a result of interviews, readings, or reports. | Evaluation of panel. |
| | View film, "Life of a Primitive People," Coronet. | |
| | Read portions of or have class read the poem, "The Auso — My Kinsman," by Rachael Elliot. | |
| | Define terms used in connection with new foods or foreign foods and service. | Quiz on terms. |
| | Use opaque projector to show photographs from book. | |
| | Have students prepare bulletin board display on "Foreign Foods," "Travel Via the Dining Room," or "Primitive Foods," including other points of interest about the country or culture. | |
| | Look up the history of such national dishes as kabob and sukiyaki for a class report. | |
| | Ask foreign student to talk about food customs in his country. Have question period. | |
| | **Comprehension** | |
| | Make a list of the customs brought to light in class which were new, unusual or strange to students. | Evaluation. |
| | Write a paper on "When in Rome, Do as the Romans Do!" | Evaluation on paper. |
| | Discuss why certain foods are eaten by people in different areas giving consideration to climate, foods produced, economy, mobility. | Discussion. |
| | Provide a homemaking table in the library where reading material on foods and food customs of other countries is available. | |
| | Write a short paper comparing one of the following:<br>1. Chicken in Germany and Spain | |

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| | 2. Rice in Italy and Japan<br>3. Vegetables in Russia and Italy | |
| | **Application** | |
| Specific foods, method of preparation and serving, and times at which foods are eaten, acquire symbolic meanings associated with religious beliefs and ceremonies, social usages, status, ethnic and family traditions, maturity levels, and masculine and feminine roles. | Divide class into groups. Have each group present a socio-drama of Food Customs and Habits of a Country.<br>Wear appropriate clothing and prepare the food, if possible.<br>Double ring discussion of socio-drama.<br>Plan a United Nations Dinner which might be used for a special group meeting. | Evaluation based on completeness and accuracy of drama presented. Write a report on a restaurant visit with comparisons — bringing out special points of interest relative to service. Evaluate plan. |
| Some knowledge of food from other countries affects our appreciation and understanding of other countries in addition to increasing our enjoyment of food. | Interview a foreign student before the class session to get information relative to foods of his country.<br>Plan and serve a meal in cooperation with a Spanish or German class, working together on plans, preparations, and serving.<br>Plan a family type meal using a typical foreign menu.<br>Plan a "Special Occasion" meal.<br>Divide the class into units and prepare a complete meal of another culture.<br>Prepare a new food or foreign food at home. | |
| | Prepare individual nationality "special" foods, i.e., yeast breads. Discuss the food samples brought from home. | Lab technique and finished product. |
| | Plan and sponsor an assembly program on foods and food customs in other lands.<br>Plan a window display or an "other lands" exhibit for a food store in your community.<br>Discuss the food commonly eaten in the home that reflects another country.<br>Discuss the relationship of certain foods that are eaten in different areas to climate, seasons and foods produced. | |
| | **Analysis** | |
| Much interest and variety may be achieved in regular and special meals if one uses originality when preparing and serving food. | Identify American eating customs which are related to our environment. Think of the drive-in, TV dinners, midnight snacks. Look at yourself through the eyes of a foreigner.<br>Identify the customs and the foods. | |
| Experiences in eating new or foreign foods may result in modification of food habits or development of a greater aesthetic appreciation for previously disliked food with similar ingredients. | Analyze the ingredients and recipes used in preparation of special foods and method of preparation.<br>Evaluate the menus planned. Evaluate the food preparation. | Evaluation of menus. |
| | **Synthesis** | |
| | Study available recipes for foreign food and figure out how they could be adapted to use food products and ingredients available here. | |

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|  | Devise a type of score card for evaluating the foreign food product or products. "What should it look and taste like?" | Write a theme or paper on how foreign foods have become a part of America. |
|  | Elect a class member to write a news article for the town and school papers about the activities of your class with foods from other lands. |  |
|  | Plan and prepare a tea for mothers using foreign foods to be served after school. | Evaluation of tea. |

**Concept B: Creativity in food preparation and service.**

**Objective B: Maturity of attitude toward new and/or unusual foods and methods of preparation.**

**Generalization: Adapting principles of food preparation, meal planning, use of equipment and food service to each situation has an effect on the creativeness of the meal.**

**Concept 1: Creative food combinations and meal service.**

**Objective 1: Integration of criteria for combining and serving foods attractively.**

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|  | **Knowledge** |  |
| To sit down to a healthful, appetizing meal served on a table set in good taste and in harmony with its manner of living is especially pleasant for a family. | Define terms: Appetite, garnish, appetite appeal, aesthetic, eye appeal, appreciation, aesthetic appreciation and other new terms. |  |
|  | Observe pictures of food served in meals. |  |
|  | Bulletin boards with pictures displaying appeal and non-appeal in foods and the effect on the appetite. |  |
| Sensory qualities of food, such as color, sound, flavor, texture, temperature, and appearance, serve to identify foods and serve as one basis for characterizing preferences. | Search resource materials for hints on serving foods attractively. |  |
|  | View filmstrips and films displaying foods served attractively. |  |
|  | Review of previously learned types of meal service. Supplement as needed. |  |
|  | Demonstration by local person in making attractive table decorations. |  |
|  | **Comprehension** |  |
| Appetite appeal is a combination of stimulating forces encouraging one to want to eat. Aesthetic appreciation is the quality of satisfying inner feelings for beauty. | Discuss local customs and traditional influences that enter into meal service. |  |
|  | Discuss pictures on bulletin board as to appeal or or non-appeal. | Student participation. |
|  | What would improve the non-appealing food? |  |
| Meals are appetizing when they are pleasing to look at. | Discuss affect of odor, and color upon aesthetic appreciation. |  |
| The order of service for a meal is dependent upon tradition and the situation. | Identify sounds associated with pleasure in foods such as perking coffee and sizzling steaks. How do they contribute to appetite appeal? |  |
| Table appointments include the table covers, glassware, dinnerware and flatware. | Discuss the fact that a person's appetite comes at the "seek and call" of the five senses. |  |
|  | How will an understanding of these senses help a homemaker to create appetite appeal? |  |
|  | Discuss the statements "The skillful food manager |  |

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| | works with food with the finesse of an artist choosing colors for a picture." | |
| | "Good cooks rely on color to make the food sing before it is sampled." | |
| | Discuss shapes and forms of food in planning meals with "eye" as well as appetite appeal. | |
| | Discuss various textures found in food. Why are a variety of textures considered acceptable to most people? | |
| | Discuss ways to achieve variety in texture as crisp bacon with scrambled eggs, cream filling in flaky pastry. | |
| | Discuss "why" of the statement "Serve hot foods hot and cold foods cold" — How can one do this? | |
| | Discuss the size of the serving containers in comparison to the amount of food and the amount of space on the table in relation to serving a meal for two people. | |
| | Discuss the meaning of the phrase "cultivated taste." How can one heighten or improve taste of a food? | |
| | **Application** | |
| Sensory quality of food affects the appearance of food. Attractive meals appeal to the aesthetic sense of the family and contribute to a feeling of satisfaction and well-being. | Role-play common reactions to sitting down to various attractive and unattractive meal situations. | |
| | Each girl observes the method of obtaining praise for the meals by the family members in her home. | |
| | Report to class. | |
| Manner of food service affects atmosphere of dining and appreciation of food. | In a panel discussion develop a judgment about the importance of abiding by cultural tradition in the American society. | Panel discussion participation. |
| | Write a paper on the importance of sensory qualities of food. | Paper. |
| The type of setting depends upon the meal and how it is served. | At home add extra touches to a supper meal through use of a different method of service, original table decorations, and dressed up foods. | Parental reaction by a short comment. |
| | Dine at a restaurant featuring a special service. | Write a paper. |
| The aesthetic qualities of a meal reflect the creativity of the hostess. | Discuss the relation of certain special occasions to the types of meal service used. | |
| | Choose table appointments appropriate for the following:<br>1. Formal family meal<br>2. Informal family meal<br>3. Family snacks<br>4. Family picnics | Table appointments. |
| | Arrange each in an individual cover. | Covers.<br>Test. |
| | **Analysis** | |
| The aesthetic values of individuals may be expressed and satisfied through preparation and service. | Write a short paper describing reaction to a meal that was colorful, with good aroma, tasty, and any other qualities that made it a pleasant meal. Analyze. | Written papers. |
| Sensory qualities of food may be modified to stimulate ap- | Analyze the statement, "It looks delicious." Discuss experiences when a food that "looked terrible" tasted good. | |

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| petite appeal and increase aesthetic enjoyment. | Give examples of table settings. Each student analyzes the examples of harmonious or unharmonious arrangements. Write conclusions in a short paper. | |
| Appropriate table settings may result from creative use of inexpensive pottery, flatware, table coverings, and other decorative accessories. | Analyze the atmosphere of an outdoor barbecue compared to a formal dinner party. | |
| | **Synthesis** | |
| The design principles should be applied when making table appointment choices. | Recall the art principles used in housing and clothing and relate them to combining foods, arrangement on plates, and table settings. | |
| | Class plan a dinner menu. Each unit will serve basically the same food, but adjust it to fit a different atmosphere. | Originality and extent of accomplishment. |
| | Units will use different types of service and table settings and equipment. | |
| | All students will share experiences. | |

### Concept 2: Gourmet cooking.

### Objective 2: Synthesis of the principles of cookery to gourmet foods.

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| | **Knowledge** | |
| Basic food cookery principles form a basis for creativity in foods. | Pretest to determine basic understanding and abilities of cookery principles | |
| | Visit to grocery store to find new foods on the market | |
| Gourmet cooking involves creativity in the use of unique ingredients. | Definition of terms to be used in this section: Gourmet, epicure, connoisseur, hors d'oeuvres. | |
| Gourmet cooking sometimes involves use of new equipment or new ways of using present equipment. | Have demonstrator from utility company come and show versatile ways of using equipment. | |
| | Read references and pamphlets on the ways foods may be dressed up. | Pencil and paper quiz. |
| | Discuss "dressing up" foods with garnishes, seasonings, and decorations. | Interest shown in new foods. |
| | Bring "old" recipe books to class, that is, those nearing antique category. | |
| | Additional Suggestions for Study: | |
| | Read text on background and methods of pastry-making, deep-fat frying, yeast breads. Learn principles involved. | Test. |
| | Prepare bulletin board display of specialty foods. | |
| | Use the same techniques for other specialty foods to be studied at this grade level.<br>Pastries, one and two crust<br>Doughnuts and other deep-fat fried foods<br>Cream puffs<br>Tortes<br>Steamed puddings<br>Parfaits<br>Souffles, if not done in foreign food section<br>Yeast bread variations<br>Game<br>Sea food | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | View films and filmstrips relating knowledge on new methods in preparing foods. | |
| | Find recipes of foods using the same ingredients in different ways. | Observation of variety. |
| | Observe reactions of people eating in the school cafeteria, public restaurant. | |
| | Study food habits and customs of people. Define terms related to new foods or foreign foods. | |
| | View filmstrips on "Spices and Herbs: Secrets of Seasonings from Five Countries," McCormack. | |
| | Smell and taste panel on spices, herbs, and seasonings or on foods to which some seasoning has been added. | |
| | Visit a hotel or restaurant and observe ideas for creative cookery. | |
| | **Comprehension** | |
| | Plan to prepare new convenience foods with some variations. | Check plans. |
| | Plan the use of a prepared food in an old tried and true recipe. For example, mashed potatoes and plum dumplings. | |
| | Compare present-day recipe books with an "antique" cookbook noting differences in ingredients, methods, and finished product. | |
| | Discuss uses of the new and different foods found at grocery store. | |
| | Discuss various cooking methods, seasonings, sauces, decorations. | |
| | Discussion of equipment demonstration with safety implications. | |
| | Use references to check on substitutions that can be made in a recipe. | |
| | Have a committee display an herb and spice chart showing variety of uses. | |
| | Plan to use some new spice, garnish, or decoration on everyday food to add variety and attractiveness. | |
| | Calculate the cost involved in gourmet cooking, that is original cost—length of storage of spices. | Write a paragraph on things observed. |
| | Discuss a visit to hotel or restaurant. | |
| | Read and discuss poem by A. A. Milne, "What is the Matter with Mary Jane? She's perfectly well, and she hasn't a pain, and it's lovely rice pudding for dinner again! What is the matter with Mary Jane?" | |
| | Recognize that there are ways to dress up a food to add interest. Additional Suggestions for Study: | |
| | Study effects of varying methods and ingredients on the finished product. Use this knowledge in understanding methods of combining, judging reliability of recipes, and accounting for success and failure. Demonstrate pastry making, deep-fat frying, yeast bread variations, and other special foods. | |
| | Make a list of reactions to descriptions of foods served for a meal. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Application** | |
| Creativity depends upon basic cookery plus experimentation and variation. | Choose one food and plan for several variations with each laboratory unit preparing one recipe. | |
| | Prepare an ordinary food using a new spice, garnish, or decoration. | |
| | Prepare instant foods and regular preparation foods. | Taste test. |
| The reaction of the family to "gourmet" foods depends upon the method of introduction to the family. | Arrange a display of variations possible for seasonings of some particular food. | Test over spices and new foods prepared in class. |
| | Study ads in new magazines for uses of prepared foods. | |
| Participation in planning, preparing, and serving meals can be a source of pleasure and satisfaction, and provide an opportunity for aesthetic and creative expression. | Develop a score card to score new foods. | List foods found at the store. |
| | Plan and prepare family meal featuring a "gourmet" food. | Fill out a score card on each one. |
| | Plan and prepare a special occasion or "company" meal featuring a gourmet food. | Evaluation of lab techniques and finished product. |
| | Role-play the reaction of individual family members to a new taste. | |
| | Discussion of reactions and how to overcome difficulties. | |
| | Students prepare a gourmet food of their choice at home to be tasted by class. | |
| | Student demonstrations showing creativity with a food. | Originality used by student. |
| | Try eating a previously disliked food in a new way with a positive attitude. | |
| | Refer to chart and make suggestions on simple variations of popular foods. | |
| | Work out a score card for new and different foods. | |
| | Prepare some new convenience food with some variations. | Taste test. Use performance test to grade products. |
| | Prepare a tried and true recipe using a new convenience food. | |
| | Begin a recipe collection from newspapers, magazines, TV commercials, and books. | |
| | Discuss a variety of ways of accumulating hints, menus, and recipes so that they do not become useless — keeping good ones — discarding poor or impractical ones. | |
| | The following experiments were adapted from West and Sobye, *Handbook of Food Preparation.* New York: Macmillan Co., 1937. | |
| The factors which favor fat absorption are: low temperature of the fat, long cooking, richness of food in fat and sugar, large surface area, and little gluten developed. | 1. Experiment to determine the effect of mixing upon fat absorption of doughnuts by using ⅓ standard recipe and (a) mixing the dough 2 minutes after all of the flour and milk have been added, and (b) mixing the ingredients very little after the addition of flour and milk (muffin method). Compare texture and degree of fat absortion. | |
| | To indicate the way different fats affect the flavor of doughnuts, prepare ⅓ standard recipe and use the following for frying: lard, vegetable oil, and hydrogenated fat. Compare the flavor. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The higher the smoking temperature of a fat or oil, the better it is for deep-fat frying. | | |
| A fat which is easily cut and coated is desirable in mixing of pastry. | 2. Experiment to compare the effect of various kinds of fat used in making pastry by using ½ standard recipe and substitute the following fats for lard: hydrogenated fat, butter, vegetable oil. Use standard method of mixing. Compare the texture, flavor, and appearance with standard product. | |
| If not enough fat is used or insufficiently mixed, loose flour will absorb so much water that gluten will form to the extent of giving a hard crust. | To compare the effect of various amounts of fat used in pastry use lard: 1 T., 5 T., and ½ cup. Note the amount of water needed to dampen the ingredients and the relation between the tenderness of the product and amount of water. | |
| Hot water will give a tender but crumbly crust. | To determine the effect of varying the method of mixing, use ½ standard recipe. When mixed, roll the pastry in rectangular form, pierce, and bake at 450° F. (a) Cut fat in until the particles are size of small peas, (b) Cut fat in, but mix dough thoroughly, (c) Use hot water with the fat and stir in dry ingredients. (d) Use one of the mixer methods.<br>Note differences in texture and hardness. | |
| | 3. Experiments with yeast are given in Ninth Grade Resource Unit. | |
| | Identify techniques in handling special foods. Determine standards. | |
| | **Analysis** | |
| Creativity in food cookery may be used by today's homemaker with confidence and success. | Analyze the previously related recipes and discuss how ingredients can be adjusted to produce different types of dishes. | |
| | Evaluate the foods prepared at home, in class. | Evaluation of finished products. |
| | Analyze the possible reaction to trying a previously disliked food prepared in a new way. | |
| | Analyze recipes to determine their taste appeal and possible substitutions to meet family tastes. | Evaluation of total menu prepared. |
| | **Synthesis** | |
| | Each unit develop a menu with each girl selecting a well-known food which she will make interesting by using it in an original way. | Observe creativity. |
| | In a home experience prepare a previously disliked food in a new way and report reaction of new food. Encourage use of foreign foods. | |

### Concept 3: Outdoor Cookery.

### Objective 3: Perception of the principles of cookery utilized in outdoor food preparation.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| | Study trip to a local restaurant which prepares food using charcoal. | |
| | Study or review cuts of meat to help in determining method for outdoor cookery. | Quiz or discussion. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Building a fire and cooking outdoors can be safe. | Read, see film, or have resource person, such as a scout leader or scout, demonstrate a method of building a wood fire. | |
| | Read or have a fireman or forest ranger talk to group about safety and fires. | Demonstration given by student. |
| | Have someone in the class demonstrate building a charcoal fire. | |
| Sanitation practices must be used to keep food from spoiling. | Read about food spoilage and sanitation practices when cooking outdoors. | |
| Methods of outdoor cookery include grilling, skillet cookery, toasting, cooking in a hole, baking in embers, and planking. | See pictures using opaque or overhead projector of different methods of outdoor cookery. Read about edible wild foods. | |
| | Read or see films relating to ancient methods of outdoor cookery. | |
| | Read about history of cooking. Define terms such as barbecue, skewer, rotisserie, charcoal, kabob, spit. | Definitions given. |
| | Read about food preparation in other cultures where cookery is done over an open fire. | |
| | Survey grocery stores for equipment and supplies available for the outdoor cook. | |
| | Use films or read in a text or pamphlet about methods of outdoor cookery. | |
| | **Comprehension** | |
| | List situations or occasions for outdoor cookery. | Situations suggested by students. |
| Principles of cookery can be adapted for use outdoors. | List generalizations already known which may be helpful to the outdoor cook. | Generalizations recalled. |
| | Make a bulletin board showing various methods of outdoor cookery. | Bulletin board. |
| Sources of information are available for outdoor cookery. | Bring to class newspaper articles dealing with food spoilage caused by improper storage. Place on bulletin board. | |
| | Bring to class pamphlets and cookbooks for outdoor cookery. Discuss types available. | |
| | Find recipes using edible wild foods. | |
| | Collect wild foods and bring them to class. | |
| | Bring outdoor cookery recipes to class; exchange recipes. | |
| | **Application** | |
| Outdoor cookery varies with the available foods and situation. | Prepare foods outdoors by various methods. | Preparation of foods — methods. |
| | Make improvised equipment for outdoor cookery from direction or suggestions. | |
| | Prepare edible wild foods in the classroom or outdoors according to recipes which were found. | |
| | Build a fire following directions of pamphlet or resource person. | Method of building fire. |
| | Prepare foods typical of other cultures whose people cook outdoors or over an open fire. | Products prepared and methods used. |
| | Prepare foods typical of historic times over an open fire or outdoors. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Analysis** | |
| | Compare the food value, cost, time, and energy spent in preparation and cleanup of specific foods cooked outdoors in a variety of ways. | Discussion or written comparisons. |
| Methods of cleaning will have an effect upon the amount of energy required and the finished product. | Compare various methods of cleaning outdoor cookery equipment as to ease of cleaning and finished product. | Discussion or written comparisons. |
| | Compare methods and techniques of cooking outdoors with cooking indoors. | |
| Dangers affect safety precautions suggested when cooking outdoors. | Examine directions given on charcoal bag or charcoal lighter fluid. | Discussion and questions raised. |
| | Try to explain why various directions and precautions are given. | |
| Values and skill may affect the enjoyment received when cooking outdoors. | Form buzz groups or discuss as a class, "Camping is no vacation for mother." Separate values from facts during discussion. Or write a paragraph on the same subject. | Class discussion or paragraph. |
| | Students make suggestions for improvements in a menu provided by teacher for an outdoor meal. | Suggestions for improvement. |
| | **Synthesis** | |
| Outdoor meals may be adapted to fit the needs of the family. | Plan a low cost outdoor meal. Plan a low calorie outdoor meal. Plan a quick-to-prepare outdoor meal. | Menus planned according to various criteria. |
| | Plan outdoor meals and plan alternative indoor methods. | |
| | Prepare display of improvised equipment for outdoor cookery. | |
| | Create or change a recipe to be prepared outdoors. | Recipe creations. Menus planned. |
| | Plan, prepare, and serve an outdoor meal of any type to fit your family. | Written or oral reports. |
| | Report to class or on paper about the menu, facilities, and feelings of family members. | |
| | Think of a way to improvise or adapt a piece of equipment for outdoor cookery. Demonstrate to the class. | Ideas and demonstration. |
| | Plan menus using wild edible foods. Plan menus using only wild foods, for a *survival* weekend. | |
| | Plan and prepare outdoor meal for class or invite guests. | Discussion or written evaluation. |
| | Plan outdoor class party having everyone help with the preparation of the food. | Plans and evaluation for party. |
| | Plan menus for family camping trip using own or hypothetical family. | Series of menus; supplies and equipment needed. |
| | Describe circumstances and give details about meal plans. Evaluate by discussion as to practicality for situation, cost, nutritional value, and criteria for aesthetically appealing menus. | |
| | Brainstorm on equipment which could be adapted for outdoor use — refrigerator, grills on concrete blocks, chicken wire baskets, wire hanger skewers, pail or can ovens. | Ideas suggested. |
| | Adapt favorite recipes to outdoor cookery. Try recipes at home; report success to class, exchange recipes. | Appropriateness of adaptations; writing of recipe. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Combine all recipes to make pamphlet of outdoor cookery recipes. | |

**Concept C: Processed foods in the meal.**

**Objective C: Appraisal of various processed foods in the family meal plan in relation to time management.**

**Generalization: The use of the various processed foods may save time for the homemaker.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Organizing good safe work habits into a flexible schedule has the advantage of saving time and effort for the homemaker. | Read about time and energy management and processed foods. | |
| | Invite home extension agent to give an illustrated talk on "The Essence of Time." | |
| | Demonstrate work simplification methods of food preparation and serving. | |
| Time and energy are personal resources differing from each other but highly interdependent. | Invite safety specialist from utility company to talk on "Safety in the Kitchen." | |
| Processed foods are found in these forms: canned, frozen, ready-to-eat, ready-to-use, and packaged mixes. | Define terms: Management, schedule, dovetailing. See slides, "Mealtime Can Be Magic." Ag. Ext., University of Minnesota. | |
| | View display on convenience foods. Check magazine ads for new convenience foods and ideas for service. | Place on bulletin board. |
| For unexpected change in plans or unexpected guests, the wise homemaker is prepared by having a well-stocked shelf or freezer. | Study storage of foods. | |
| | Study freezing of foods. | |
| | View film: "Wrapping Food for Freezing." Ag. Ext. University of Minnesota. | |
| Generally speaking, any canned, dried, packaged or bottled food is considered a pantry-shelf item; that is, anything that does not require refrigeration to keep it usable and fresh in its original container. | View slides: "Freezing Fruits and Vegetables." Ag. Ext., University of Minnesota. | |
| | Demonstration on preparing foods for the freezer. | |
| | Study trip to investigate kinds of frozen foods sold in grocery stores. | |
| | Look over ingredient list on product. | |
| | Students survey homemakers in the neighborhood on what they do while the automatic washer and dryer and dishwasher are running. | |
| | Survey the neighborhood for problems homemakers find in time and energy treatment. | |
| Food nutrients are retained in frozen foods by fast and very low temperature processing. | Panel of business girls, working mother, and newlywed, "My Problems in Managing Time With Meals." Make a tape recording for later use. | |
| | **Comprehension** | |
| | Discuss situations in which labor-saving equipment is a wise investment. | |
| | Discuss advantages and problems created by use of labor-saving devices | |
| | Check home kitchens for convenience foods. Report to class and discuss preparation times. | Write down preparation time for each. |
| | Discuss pros and cons of using convenience foods. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Discuss safety hazards of leaving house with appliances in operation. | |
| | Class groups make lists of supplies needed in a staple cupboard for a prospective bride. | Ask each girl to make her list and check total price. |
| | Discuss how each food should be stored — unopened and after opening. | |
| | Discuss an emergency shelf and how it is used. | |
| | How has it been used in student's own home? | |
| | Discuss proper thawing of frozen foods. | Write a paper, "This is What Time and Energy Management Is." |
| | Discuss the usefulness of a freezer for everyday use; for emergency use. | |
| | Observe workers at a community or church supper. | Keep a log for a week of time and energy savers used at school or at home in food preparation. |
| | Write a paper on "How does the preparation for this type of meal differ from that at home in relation to time and energy?" | |
| | Make a list of time savers in preparing food for a large family gathering. | Make a list—report back to class. |
| | **Application** | |
| Depending on the form of food and the preservatives added, your cupboard, freezer, or refrigerator provide a place for storage. | Work out desirable substitutes for a specific recipe if food is not on hand. | Discuss how this could be avoided. |
| | Make plans for an "emergency shelf" meal from the freezer and from the pantry. List food required for meal. | |
| | Plan and serve a meal with "bought" ready-cooked foods from the freezer. | |
| | Plan the freezing of leftovers to provide homemade TV dinners. | |
| The amount of time needed to prepare a certain food for serving depends on how much work has been done during processing. | Plan a "Party from the Freezer." Students arrange school kitchens for convenience and safety. | |
| | Prepare and serve such foods as rolls, pizza, coffee from scratch, mix, partially baked, or completely baked. | Use as home experience. |
| | Score as to quality, time spent in preparation, storage needs, and cost per serving. | |
| Using small electric appliances or cooking pots and pans at the table affects the amount of time and energy used in serving a meal and clean-up afterwards. | Have each unit plan several breakfast and dinner menus suitable for a family with a working mother. Indicate form of food recommended to free mother from kitchen time. | Report to class. |
| | Keep record of time spent in cleaning up and washing dishes after dinner at home. | Write paragraph on ways to save time in carrying out task. |
| Using "blue plate" table service enables the homemaker to save time and energy especially in trips to the dining table and in dishwashing. | Plan one-dish meal with accompaniments to be prepared, served, and cleaned up in 55-minute class period using processed food and blue plate service. Students plan "A 30-Minute Meal." | Re-evaluate in light of changes made. |
| | Based on your own values, choose time and energy savers in terms of equipment and convenience foods. Prepare meal with one girl preparing the food, one recording time and equipment used, one recording steps, and one keeping track of motions of the girl preparing food. Repeat after revising plan. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | For the meal above, one girl from each group goes to the store to shop for the groceries; one half of the girls select the food before looking at shopping list. Role-play results to class. | Keep a record of items missed before checking the list. |
| Performance of routine tasks according to a plan, designed to be used again and again, facilitates planning, preparing, and serving food. | Experiment with labor-saving devices using the same piece of equipment of different types; perform a simple task, keeping record of time, results, comments; for example, grater or shredder; mixette, electric mixer, different kinds of beaters; knives. | Write a summary of your choice for the task and why you chose it. |
|  | Make a clipping file on "Time and Energy Savers With Food." | Score quality of file. |
|  | **Analysis** |  |
| Labor-saving devices can be used to manage personal resources which will enable families to reach their goals. | Describe a meal that was served late. |  |
|  | Analyze why it was late and how to remedy it another time. |  |
|  | Keep track of time spent in meal preparation at home for weekend. |  |
|  | Discuss and determine time savers that could be used another time. |  |
| Saving time and energy in preparing meals will result in the homemaker having more time to spend in other activities that give her pleasure. | Discuss home experience with processed food; how would they fit into different family meal-time schedule needs? |  |
|  | Analyze the value of serving the family meals on schedule and with care. |  |
|  | Why is leisure time important for the homemaker? |  |
|  | What are leisure time activities and how does a homemaker work leisure activities into a busy schedule? |  |
| By making use of food sales, the homemaker may have a sufficient supply of canned and frozen fruits, meats, and vegetables to tide her over when shopping plans go wrong or unexpected guests arrive. | Analyze meal plans made to determine cost, length of time to prepare, how to serve, and suitability for storage. | Make out market order with menu to tape to cupboard door for future reference. |
|  | Compare the amount of time required to prepare the ready-cooked freezer meal to a similar meal from scratch. |  |
|  | Discuss cost and when you might be justified in using this type of meal. |  |
| If you plan menus for several days or for a week in advance, meal preparation will go more smoothly and family needs and preferences can be considered. | Analyze tape recording made in terms of why these women have problems. |  |
|  | Analyze neighborhood survey of problems on time and energy management for reasons why problems might arise in the use of time and energy. | Write an analysis before discussing. |
|  | Analyze a problem situation, a story, film or filmstrip about why the labor-saving device might have been chosen or what one(s) might be used to save time and energy. |  |
|  | Analyze reasons for a homemaker feeling hurried or dissatisfied. | Write a few paragraphs. |
|  | **Synthesis** |  |
|  | Girls plan, prepare, and freeze food for a complete dinner. Plan to serve at a later date. | Use score card for evaluation. |
|  | Role-play a freezer food drama: One before freezer days and one after — such as morning rush hour, |  |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | the day before a wedding reception, the hour before dinner, or the day of a large company dinner. | |
| The factors which influence the amount of time and effort needed to prepare a meal may be the form of food selected, the methods of preparation decided upon, and the way in which the meal is served. | Give each group of students a menu. | |
| | Have them substitute processed foods and set up a time schedule to prepare and serve meal. | |
| | Students make out week's menus for a working mother using convenience foods. Consider the family situation as to amount of time to prepare the meal, number in family, ages, and activities. | Check for Basic 4 and time and energy saving. |
| | Have each unit plan a dinner menu to be prepared and served in 55-minute class period. | Score the meal. |
| Individual and family members' values and goals can be the motivation in the use of resources. | Develop a check sheet for management practices in meal preparation in relation to time and energy. | |
| | Rearrange unit kitchen. Make a list of additions that could be made in the future or possible changes that could be made with some additional labor. | |
| Values which correspond to goals will determine the satisfaction in the goal achievement. | Divide into groups and write a play "S. O. S. for Mrs. In-A-Hurry." | Products produced make up the evaluation. |
| | Revise a score sheet for storage of equipment for food using work simplification principles. | |
| | Write a paper near end of unit, "How I Can Use Time and Energy with Foods to Help My Family Reach Its' Goals." | |
| | Plan an experiment to determine how you might measure time and energy saved. | |
| | Devise the check sheet and observation sheet used for the class observed by TV. | |
| | Devise a check sheet for labor-saving devices. | |
| | **Evaluation** | |
| | Given a list of foods, have girls decide where, how, and the length of time they would store these foods. | Evaluate to recognize good judgment. |
| | Evaluate the storage of food supplies by use of the check sheet devised. | |
| Homemaking can provide opportunities for experimentation through which management practices may be evaluated and changed practices may be affected. | Write a paper "How I Feel About Time and Energy Management When I Cook at Home." | |
| | Partners observe each other doing a task and evaluate for use of principles of body mechanics. | |
| | Pretest. Retest. | |
| | Use check sheets devised and evaluate a meal by the use of labor-saving devices and management of time and energy. | |
| | Pass out copies of menus. Have students judge adequacy of Basic 4 and set up a time schedule for the preparation and serving of a meal. | Evaluate ability to judge menus and plan time schedule. |
| | Make suggestions as to how time and energy could be saved. | |

**Concept D:** Foods for special occasions.

**Objective D:** Readiness to make judgments on preparation and service of foods for special occasions.

**Generalization:** Planning, preparing, and serving foods for special occasions may stimulate interest in a variety of foods and encourage the development of creative ability.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Special occasions include wedding receptions, teas, buffets and smorgasbords, parties, dessert luncheons. | Read about the role of the host, hostess, and guest when entertaining and being entertained.<br>Read references and cookbooks in department and library on party foods and decorations. | |
| Teas, banquets, and buffets are ways of entertaining many people easily. | View filmstrips on party foods. Use opaque projector with pictures of party foods, decorations found in magazines such as McCalls, Better Homes and Gardens, Coed.<br>Discuss ways to glamorize foods.<br>Observe demonstrations on decorating party foods by a woman in community who is talented in this area.<br>View films:<br>"Arranging the Buffet Supper"<br>"Arranging the Tea Table"<br>"Let's Give a Tea" and "Dinner Party" — University of Minnesota | |
| Detailed plans, skills of the hostess, suitable facilities, and wise use of time are necessary to the success of entertaining any group. | Invite a young homemaker to class to discuss how she plans her meals when entertaining.<br>See filmstrip on centerpieces from Colorado Flower Growers.<br>Bulletin board on centerpieces for special occasion meals.<br>Display of banquet favors, invitations, menus, and programs.<br>Refer to magazines and bulletins for banquet ideas.<br>Examine pictures of suitable refreshments to serve to large groups of people. Consider the reasons why small rather than large pieces of thin cake and sandwiches are preferred on refreshment plates.<br>Observe demonstrations on making dainty sandwiches and frosting cakes.<br>Discuss the different kinds of refreshments that can be prepared in advance.<br>Study the procedures to use in serving refreshments.<br>Write a paragraph about a recent wedding reception or wedding anniversary, in an attempt to recall every detail as introduction to unit. | |
| | **Comprehension** | |
| The chief aim when entertaining friends is to make them feel sincerely welcome and to see that they enjoy themselves. | Discuss the relationship of developing social consciousness through roles as host, hostess, and guest.<br>Family groups choose a particular family occasion to recognize and clip ideas that could be used for invitations, refreshments, and decorations. | Start a file of ideas for invitations, refreshments, and decorations. |
| There are countless ways to prepare foods for entertaining. | Arrange bulletin board display of ideas for various occasions. | |
| Planning for fellowship as well as an appetizing meal are the concern of a hostess. | List kinds of guest meals possible in home and evaluate from standpoint of cost in money, time, and energy.<br>Discuss forms of entertaining practices in a house, an apartment, outdoors, and in public places. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Discuss the importance of a pleasant place to eat. | |
| | Discuss ways you might entertain at home. | |
| | What guides would you use to determine which method of entertaining you use? | |
| | Discuss the methods of food preparation that allow the hostess to be free to entertain. | |
| | Discuss what determines the type of foods to serve at a buffet meal. Discuss factors which contribute to successful entertaining. | |
| | Discuss selecting and arranging suitable centerpieces for the dining table for different occasions. | |
| | Discuss foods that may be used for special occasions, dips, fancy casseroles, Hor d'oeuvres, tarts, tea sandwiches, beverages, cookies, punch, and desserts. Classify as to suitability for different types of parties. | |
| | Discuss occasions when banquets are appropriate. | |
| | Recall banquets attended and determine factors that contributed to success. | |
| | Consider foods that require last-minute operations for banquets. | |
| | Discuss allowance of time for pre-preparation. | |
| | Relate experiences at teas. Draw conclusion as to purposes. | |
| | Discuss the practices of hospitality that are traditional in the South. | |
| | Discuss occasions when it would be possible to give a tea. | |
| | List appropriate recorded music for a tea and other special occasions and discuss the value of such music. | |
| | **Application** | |
| Participation in accepted social practices can contribute to the individual's facility and security in various situations involving food. | Make a plan for the preparation of a guest meal which might be prepared with an hour's notice. | Use as home experience. |
| | Make a plan for a guest meal which allows the hostess to be unhurried, calm and able to enjoy guests and family. | Report to class. |
| | Plan the setting of table for dinner so that no one need leave the table to serve. | |
| | Divide class into groups of four girls each. Each group plans for food to be served for one type of entertaining, considering such points as number to be served, amount of money available, and how to be served. | Score on completeness of plans. |
| Attractive decorations and table arrangements add materially to the meal. | Arrange centerpiece suitable for particular occasion. | Use score card. |
| | Prepare variety of special occasion foods. | |
| | Plan, prepare, and serve a buffet meal for members of group. | |
| | Prepare a list of responsibilities involved in giving a banquet, determining qualifications of general chairman and what special committees are needed. | |
| | Plan, prepare, and serve a banquet for some occasion. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | Plan appropriate refreshments to serve at large group meetings. |  |
|  | Organize committees for planning, preparing, and serving the refreshments for a large group. |  |
|  | Prepare and serve refreshments to a group or groups, such as Honor Society Luncheon for parents, teachers, and students. |  |
|  | Class write an invitation to a tea, wedding reception, anniversary celebration, parties. |  |
|  | Practice proper etiquette at a tea. |  |
|  | Set up formal and informal tea service and practice using each. |  |
|  | Investigate proper use of serving equipment. |  |
|  | Make a drawing of a tea table, showing the location of china and food. |  |
|  | **Analysis** |  |
| A proper choice of foods can determine the success of a gathering when one is entertaining a large number of people. | Students list the problems which a newly married couple might face when having their first guest meal. |  |
|  | Determine responsibilities of the host and hostess. |  |
|  | Give students menus — determine form of table service one would use to encourage sociability; form one that would be used to impress people. | Quiz on types of service. |
| Guest meals may be simple with touches of glamor.<br>When one is entertaining, the method of serving food can help determine the success of a meal. | Describe an enjoyable guest meal you had at home and analyze why it was enjoyable. Analyze manners one needs in order to be socially acceptable in each of the following situations: at home, in a hotel dining room, in a restaurant, in a dining car, at teas, formal and informal receptions, at formal and informal dinner parties. |  |
|  | Evaluate buffet meal in terms of hostess experiences, guests, and those who prepared meal. Determine what was learned. |  |
| Consideration of available resources may influence the type of food, the type of service, and the number of people. | Evaluate banquet and determine what was learned. |  |
|  | Determine cost/serving of special occasion foods. |  |
|  | **Synthesis** |  |
|  | Devise a means to evaluate, i.e., a rating scale, the large group refreshments, banquet, tea, wedding reception. |  |
| Hospitality and entertaining skill can make an enjoyable occasion of even the simplest meal. | Develop a rating scale. Score role of host and hostess in receiving guests, announcing meal, arranging table seating, serving, taking initiative at table, demonstrating good etiquette, at ease in atmosphere, guiding conversation pleasantly. |  |
|  | Plan, prepare, and serve a meal buffet style to friends. | Score as to Basic 4, suitable service, and schedule. |
|  | Plan, prepare, and serve a dessert luncheon for a new girl in your class. |  |
|  | Cost comparison of special occasion menu, such as wedding reception, to fit income level of family. | Use as home experience. |
|  | Plan a wedding reception in complete detail as to | Evaluate plan. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | menu, color scheme, food preparation, number of people and cost. |  |
|  | **Evaluation** |  |
|  | Evaluate suitability of guest menus when no help is available. |  |
|  | Evaluate refreshments prepared and served to group, such as Honor Society. |  |
|  | Evaluate illustrations from magazines as to appropriateness of table decor according to principles learned. |  |

Concept E: Management of resources in cooking for two.

Objective E: Appraisal of the importance of management of family resources in the provision of food for two.

Generalization: Personal and home management involves the decision-making process of planning, controlling, and evaluating the use of resources to attain goals and taking responsibility for the results.

Concept 1: Importance of nutrition as a basis for building or improving food patterns.

Objective 1: Analysis of the importance of nutrition in building and improving food patterns.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | **Knowledge** |  |
| Nutrition is the science of nourishing the body properly through providing for its growth, maintenance, and repair from the nutrients contained in the food we eat. | Review session using question-answer methods; how food functions, six kinds of nutrients, function of each, diseases prevented, available food sources, Basic 4 food groups, daily requirements, use of food groups in planning or recognizing an adequate daily diet, food patterns, and guides to menu planning. | Pretest. |
|  | Pretest on nutrients and functions. Then elaborate according to needs of class. |  |
|  | Field trip to home for the aged or invite someone who operates such a home to speak about nutritional needs and dietary problems of the aged. |  |
|  | **Comprehension** |  |
| Knowledge of the nutritive value of foods and the nutritional needs of your body should be used as the basis for making wise choices of foods. | Films:<br>"The Way to a Man's Heart," United World Film.<br>"Proof of the Pudding," Metropolitan Life Ins. Co. | Be alert to identification of basic principles of nutrition. |
|  | Follow by discussion of films. |  |
|  | Relate the importance of nutrition in building and improving food patterns during three phases of the life cycle: working girl, newlyweds, and geriatrics area. |  |
|  | Relate ideas and principles from film. |  |
|  |  | Objective tests on nutrition facts. |
|  | Discussion of the observations made while visiting home for the aged or discussion of the report by guest speaker from a nursing home about the nutritional needs and dietary problems of the elderly. | Student participation. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| | Divide class into three working groups for research. Each group chooses one of the following phases of the life cycle:<br>1. Working girl in apartment situation<br>2. Newlyweds<br>3. Geriatrics | Reports on research. |
| | Using textbook and reference material available, gather information for a report on the nutritional needs of each phase, why they differ, and their effect on the future health of the individual. Consider the effect of socio-economic factors, educational background, and environmental influences to adequate, nutritional meals during each phase. Report findings to class. Follow by discussion. Have students make predictions about the effects on the individual during these phases of the life cycle of complete lack or inadequate amounts of foods from each food group. | Evaluation of comprehension through statements made.<br>Quiz on varying needs of family members and why nutritional needs vary. |
| | **Application** | |
| Understanding the nutritional needs of self and family members throughout the life cycle enables the homemaker to provide nutritionally adequate meals.<br>The attitude and information of the meal planner toward food and nutrition influence the nutritional adequacy of the food served and provides a wider freedom of choice among foods in attaining adequate nutrition. | Divide the class into three groups and have each group work on one of the following problems. Use the information obtained from the research reports in planning the menus.<br>1. Plan a day's menus for a moderately active working girl who should have a fairly hearty breakfast, a moderate lunch, and a hearty dinner. The girl lives with a friend in a small apartment and takes her sack lunch to work.<br>2. Make a day's menu for a young married couple, both of whom work and eat lunch away from home. Plan for a moderately hearty breakfast and dinner which are quickly prepared, but keep food costs as moderate as is consistent with providing adequately for their nutritional needs.<br>3. Plan day's meals for an elderly and sedentary couple, who eat a light breakfast, the main meal in middle of the day, and a simple supper. Food costs may be somewhat more liberal in this case.<br>Plan a bulletin board for the whole school to view showing the nutritional needs and changes throughout the life cycle.<br>Write a skit, using all previous information on good nutrition and the change in nutritional requirements and dietary habits throughout the life cycle.<br>Emphasize how the attitude and information of the meal planner affects the nutritional adequacy of the foods selected.<br>Present the skit at an assembly program, FHA meeting, parents' group, or a Golden Age meeting. If possible, put special emphasis on the nutritional problems of the age group to which the skit would be presented. | Evaluate menus prepared for nutritional balance. |
| | **Analysis** | |
| Discrimination is required to select those foods that con- | Panel consisting of a working girl, new bride, and an elderly woman discussing the problems these in- | Panel discussion. Written summary. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| tribute a balance of nutrients to the daily diet and yet fulfill non-nutritive requirements of daily meals such as food budgets, family traditions, and individual preferences. | dividuals face in planning menus for two which are nutritionally adequate.<br>Panel members relate how food budgets, family traditions, attitude and information of the meal planner, and individual preferences influence their ability to plan nutritional meals. Students write summary of panel. | |
| An application of the knowledge of nutrients needed by the body and their sources in available foods will result in adequate food patterns. | Analyze prepared or typed menus typical of the three phases of the life cycle as to their nutritional value and their adequacy toward fulfilling the non-nutritive requirements of daily meals. | Turn in and evaluate.<br>Mary Sue has had poor nutrition and food habits during her high school years. Write a paragraph on how her present food and nutrition habits will affect her during the three phases of the life cycle. |
| If people can be made to realize the relationship of nutrition to the values they hold high, they will be interested in developing good food habits. | Write a paper on the relationship of nutrition to the values you hold high. How will your values influence your ability to develop good food habits and to select or prepare nutritious meals? | Evaluation of paper. |

Concept 2: Role of family resources in the selection and preparation of food.

Objective 2: Appraisal of the role of family resources relative to the selection and preparation of food.

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|---|---|---|
| | **Knowledge** | |
| The resources available for meeting personal and family food needs include personal capacities, available goods and services, and purchasing power. | Study assigned sections of textbooks, reference books, government publications, and journal articles to become familiar with management principles, the resources available for meeting personal and family food needs, and how these resources are planned and coordinated with family demands in the provision of food. | Give short objective type test to cover basic knowledge of individual and family resources. |
| Organization of activities in providing food for the family is achieved through planning and coordination of resources and family demands. | By means of a questionnaire become familiar with the following types of family situations to get variations in resources available, how these resources and family demands affect the provision of food. Individuals interviewed may bring up problems for their phase of the life cycle to be used later as classroom experience.<br>1. Working girls with their own apartment.<br>2. Newly married young couples, wife employed and unemployed.<br>3. Elderly couples, living independently, to discover any adaptations they have made to meet present needs.<br>Interviews could be taped for later use in classroom discussion. | Have students write a short paragraph describing reaction to interview. |
| | Study trip to several different types of grocery stores to obtain facts and information on shopping for two. | Information found and solution to problems. |
| | Students have specific information to look for and problems to solve. Assign each group of girls a specific food classification. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| | **Comprehension** | |
| | List the resources available for meeting personal and family food needs. Discuss how the resources vary among families and during the three phases of the life cycle. How are resources and family demands used to organize activities for the provision of food? | Student oral response to questions on concepts of using resources. |
| | | Question box in which individual students pick a question regarding family resources and explain the concepts involved. |
| | Plan and arrange a browsing center of cookbooks, magazines, and pamphlets containing recipes, menu suggestions, table of substitutions, equivalents, helpful hints, guides for pan size, oven temperature, storage hints, and other tools which could be used in planning and preparing food for two people. Discuss other sources where the inexperienced cook could find such information. | Evaluate students' ability to use these materials during the unit to solve problems and find information of facts which they had forgotten from previous years' learning. |
| | Hold informal discussion with experts in food buying during scheduled study trips. Students report findings from study trip and draw conclusions pertinent to shopping for two. What time, energy, and money saving ideas would you suggest when shopping for two? How can advertisements be used and what is their influence on the buyer and the market? | Student's ability to draw conclusions.<br>Notice cost differences on same products. |
| | **Application** | |
| Use of resources for household food production is influenced by time required and available for home production and for purchasing commercial products, skills, and abilities of household workers, equipment and supplies available, purchasing power, and relative cost of home produced and commercial goods. | Have each student plan a meal, or day's menu if specified, using one of the situations given in one phase of the life cycle. List the foods required for the meal or meals. Calculate the cost of the meal, time needed for shopping, preparation, and cleanup, skills employed, and equipment needed. Indicate where a convenience food will be used and its type. | Assignment handed in and graded. Short report to class. |
| | *Working Girl:* Living with friend in small, furnished apartment, little experience in foods work, no car for shopping, low cost meals, and girl on first job.<br>1. Dinner that can be prepared in an hour starting from scratch.<br>2. Emergency meal for four with some purchased "ready-cooked" foods from the freezer.<br>3. Breakfast and sack lunch prepared in fifteen minutes.<br>4. Meal that can be prepared early in the day and cooked for evening dinner. Use some canned foods. | Evaluate student's ability to select and use resources for the specific situation in meal planning. |
| | *Bride:* Living in an apartment the couple furnished, limited time for shopping, employed, average skill in food preparation.<br>1. Plan a moderate cost dinner menu to take advantage of kitchen conveniences and present-day processed foods.<br>2. Plan a low-cost dinner that can be prepared early in the day and be cooked at mealtime. | |

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| | — top of range meal — 25-30 minutes<br>— pressure saucepan meal<br>— broiled meal — 30 minutes<br>— oven meal — 30 minutes using fresh and frozen foods<br>— deep well meal<br>— serving made-overs instead of leftovers | |
| | 3. Plan a moderate cost dinner from frozen leftovers, for two unexpected guests.<br>4. Plan a liberal cost dinner from scratch making extra quantity to be frozen for later use. | |
| | *Elderly Couple:* Living in small home.<br>1. Plan liberal cost menus for one day dividing foods fairly evenly among meals. Homemaker has limited physical strength.<br>2. Plan menus for one day when the individuals need to eat more frequently than three meals. Welfare assistance and commodities are being received. The couple has limited cooking facilities. Consider commodities in planning menus.<br>3. Plan moderate cost breakfast and lunch menu for couple who have dentures and lack strength to carry heavy bags of groceries from market. | |
| | Have students working in groups select one meal from those planned. Prepare the market order, shop for groceries, and determine how the foods used in the meal should be stored. While one girl prepares the meal, another records the time required, equipment used, and skills and abilities needed. Calculate the time used for shopping and the cost of meal. | Choice, use and amount of resources needed.<br>Laboratory techniques and evaluation of finished product.<br>Satisfaction with total meal and use of resources. |
| The ability to achieve desired skill in the selection and preparation of food increases with a knowledgable use of family resources. | Plan, prepare, and serve the same meal from scratch, pre-prepared, and partially prepared foods. Calculate the cost, time spent in preparation and clean-up, quality of products, equipment, skills, and abilities needed, and time required for shopping for the meal prepared in each of the three ways. Depending on socio-economic factors of class members, changes may need to be made to plan this for classroom work or to modify for a home experience for all students. | Use as home experience.<br>Written summary. |
| | **Analysis**<br>Evaluate the meals students prepared in the classroom. Check the calculations made of the amount of each resource it was thought would be used against what was used in actual preparation. | In reporting to the class, observe student's justification of choice and use made of resources available and the benefits derived by the family as a result of choice. |
| | Evaluate the meals as to the role family resources played. | |
| | Justify the use of each resource and how this aided the family. Analyze short cuts used in food preparation for an employed homemaker, bride, and working girl. | |
| | Analyze home experiences. | |
| | Compare and evaluate the cost, time, quality, equipment, and skills in the preparation of meals using the three types of food products. | |
| | How would this affect the individuals in the three phases of the life cycle? When and why might they | |

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|  | use one of these products? Be able to justify their use. |  |
|  | Using the taped interviews with homemakers, analyze the resources they have available, how these resources and family demands are used, and the factors that influence the use of resources. Analyze the problems mentioned by individuals in the use of their resources and how they differ among the three life cycle phases. | Write an analysis before discussion.<br>Discussion. |
| The choice of which resources to use in providing food for the family may be influenced by the quantity of each resource available, the cost of alternatives, and their effectiveness in producing the desired results. | **Synthesis**<br>Set up for each group of students a hypothetical family of two from one phase of the life cycle. Give the amount of time available for shopping, preparation, and clean up, whether homemaker is employed, special disabilities of homemaker or spouse, as with the elderly, money available for food, skills and abilities of homemaker, equipment available in the kitchen, storage space available, and other needed information. | Set up menus for a week. Check and score understanding, application, and justification for the use of resources.<br>Originality and extent of accomplishment. |
|  | Student groups plan a week's set of menus. Prepare the grocery order and calculate the cost of food. List the resources used, why they were chosen, the benefit of this particular choice and use of a specific resource to the homemaker and her family. |  |
|  | From the menus prepared have each unit select a dinner menu to be prepared and served in a 55 minute class period using the resources available to the hypothetical family. | Score the meal and the selection and use of resources. |
|  | Divide the class into groups of six to discuss and role-play factors that influence the choice and use of resources in the provision of food for each of these groups:<br>1. Career girl living with a friend.<br>2. Young married couple.<br>3. Elderly couple. | Test: Give students a prepared menu for a given family situation. Substitute foods to correspond with the resources available. |
|  | Write a paper near the end of unit, "How Can My Family Improve the Use of It's Resources to Provide the Results Desired?" | Have students write an essay in which students will describe how knowledge and application of the use of family resources has helped solve some special home problems. |
|  | **Evaluation**<br>Judge the menus of the hypothetical family as to suitability to the family situation. Evaluate the choice, use, and justification of these resources. How will a successful experience in foods lead to a successful and happy home life? |  |
|  | For the role-playing groups, play menu and shopping list for each situation and evaluate as to the choice and use of resources in the provision of food. |  |

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| | | Using a variety of care situations, allow students to interpret the problems involved, relate them to the use of various resources, and make judgments as to whether the problems have any bearing on the use and role of individual and family resources. |
| | | Where feasible, possible changes in use of resources may be suggested. |
| As past societal changes influenced the way families used their resources, future use of family resources in the provision of food will vary with societal change and technological development. | Debate: "Societal Changes and Technological Development Influence the Way Families Use Their Resources in the Provision of Food." | Evaluate to recognize good judgment. |

Concept 3: Influence of values on the ability to employ the resources for the purposes desired.

Objective 3: Maturity of attitude toward the ability to employ the resources for the purposes desired.

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|---|---|---|
| | **Receiving** | |
| Values are concepts of desirable objects and conditions which are synthesized from an accumulation of experiences and which tend to endure through time. | Read to the students the "Meal Planners' Creed" by Meta Given in *The Modern Family Cookbook.* | |
| | The discussion following should lead students to come to an awareness of the values expressed in the creed, why these values may not be true for all homemakers and possible points that could be added to the creed. | Discussion. |
| | Read stories or books about families showing various value patterns. In discussion, students are helped to become aware of the different value patterns and which values are important to these families. Students should attempt to consider as many ideas as possible without drawing specific conclusions. | |
| | **Knowledge** | |
| | Students read and review selected references reporting research findings on the study of values, formulate a definition for the term "value," and acquaint themselves with the sources and types of values which people hold. Relate to the use of resources in the provision of food. | Paper and pencil quiz on value factors. |
| | Brainstorm as a class and outline how people's values differ in their relative importance and discuss how these differences influence the use of resources in the provision of food. | |
| | Ask a clergyman to speak on "Values—What Are They?" Speaker relate values to individual's philosophy of life. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| | **Comprehension — Responding** | |
| The intelligent manager develops a philosophy of life which includes decisions as to the relative importance of values and he uses his philosophy as a basis of choice. | Define value. Discuss the sources and types of values people hold. How do values influence the use of resources in the provision of food? How may the values differ and change through the three phases of the life cycle? How would this affect the provision of food in each phase? | Evaluate contribution to class discussion. |
| | To comprehend how a particular value is expressed in the provision of food, have each student select a value relating to food and prepare a written presentation interpreting the meaning of the value, its relationship to goals, an indication of ways in which people might express this value through the use of resources in the provision of food, and an indication of the way in which behavior in the foods area might indicate a lack of such a value. | Evaluate student's presentation. |
| | Hold buzz sessions following the speaker's presentation. List as many factors in an allotted time concerning:<br>a. Importance of values<br>b. Components of a philosophy of life<br>c. How a philosophy of life is used in selecting values<br>d. Relationship of philosophy of life to users ability to employ resources in food provision. | Write paper: "My Philosophy of Life." |
| | **Application — Valuing** | |
| The goals sought by a family depend not only on resources available but also on values they consider important in their family life. | Divide the class into groups consisting of four girls. Each group, using one of the three phases of the life cycle, plans the menu for one of the entertainment activities suggested:<br>— buffet supper<br>— foreign food dinner<br>— dinner party<br>—outdoor barbecue<br>— Mother's Day luncheon<br>— birthday dinner<br>— anniversary luncheon<br>— dinner for one of the major holidays of the year<br>— brunch<br>— christening luncheon<br>— engagement dinner | Evaluate plans for entertainment activity. Score the meal. Report to class. |
| | When planning the menu for entertaining, consider number to be served, amount of money available, time, skills, and equipment available and how to serve. Use some special foods in the menu. Plan, prepare, and carry out this activity in the laboratory. | |
| | Role-playing — Have students take the parts of homemakers from the working girl, bride, and geriatrics groups to show how the selection of special foods for various kinds of entertaining is influenced by the values considered important to the family and the goals they sought. | Written statement: Study one's own family and identify the values they consider important in their family life. How do the val- |

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| | | ues and resources of your family influence its goals in the area of providing food for the family? |
| | Have a *This Is Your Life Program* and work in situations in family food provision to show how the food manager(s) in the family uses his philosophy as a basis of choice in the use of resources and how the goals sought by a family depend not only on the resources available, but also on the values the family considers important in family life. Use the three phases of the life cycle—the working girl, newlyweds, and elderly couple — for the basis of the program and build a story using family examples and situations. | Evaluate students' understanding of the influence of values and their ability to apply the knowledge. |
| | **Analysis — Organization** | |
| | Evaluate the entertainment activity. Have each group analyze the entertainment, menu, and special foods used. Try to pick out the goals sought by the group from this activity and how the values they consider important in family life as well as resources available influenced their choice of special foods. Scrutinize the choices made in relation to these two factors and detect the effect of these choices on the family well-being. Analyze the use, generally, of special foods in entertaining. Discuss the value and purposes they serve and the conflicts that may arise from their use in relation to food budgets, satisfactions received from production, philosophy of life, hierarchy of values. Analyze the value and satisfaction obtained from foods work. | Written evaluation by group.<br>Class evaluation of activity.<br>Written statement: Individual analysis of paper, "My Philosophy of Life." Identify values which would affect individual's usage of personal and family resources in the provision of food. |
| | Analyze role-playing situations. These situations depicted individual behavior in certain ways because of the values which they held. Analyze the apparent values and goals of each family from the special foods selected. Through discussion, students point out alternative course of action in reference to special foods used and overall use of resources. Outline the consequences which they predict may result for the family from such behavior. | Evaluate student's ability to recognize values, goals, and consequences. |
| | Analyze advertisements in newspapers, magazines, and TV commercials. Discuss values placed by our society on factors of food provision and use of family resources. How do the advertisements for special foods reflect values held by society for families? Analyze which phase of the life cycle the advertisement is written to influence. | Evaluate student's written analysis of advertisements. |
| | **Synthesis** | |
| The choice of which resource to use in providing food for the family may be influenced by the ability of the user(s) to employ the resources for the purposes desired. | Give each student a menu for a specific type of entertaining at each phase of the life cycle. List the resources available to the family for this entertainment activity. Have students substitute foods consistent with the resources available and the end purposes desired. | Evaluate the substitutions made in menu plans. |
| | Divide into groups and write a play. Family situations during the three phases of the life cycle depicting how the resources selected to be used by the family will depend on the individual's ability to use the resources for the purposes desired. | Evaluate content of play. |

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| | Divide the class into three groups. Plan and carry out the following entertainment activities:<br>1. Working girls — bridal shower<br>2. Bride — tea<br>3. Elderly couple — 50th anniversary open house | Evaluate planning and carrying out of activity. |
| | Other students will be guests. Plan the activity in complete detail. Provide the students with a list of all resources available to each group. Before beginning to plan, have each group of students write a statement as to the end purpose desired in this activity. | Evaluate students' ability to employ resources for the purpose desired. |
| | **Evaluation — Characterization**<br>Evaluate the consequences brought out in the play of unwise use of family resources. Make predictions about future problems of these families in the use of resources and the effect of parental family environment on your use of resources in the future. | |
| | Evaluate group entertainment activities. Evaluate the students' ability to employ the resources for the purposes desired. If the end result was not consistent with what it was thought it should be, decide how the resources could have been used differently to achieve the result hoped for. | Evaluate to recognize good judgment. |
| | | Write a paper:<br>"Importance of Management of Family Resources in the Provision of Food."<br>Consider:<br>— importance of nutrition<br>— role of family resources<br>— use of resources for purposes desired |
| The influence of values has an effect on the user's ability to employ the resources for the purposes desired in the provision of food. | *Home Experience:* Keep a diary for a week. List the resources available to your family during the week for the provision of food. Record important decisions you and your family had to make in managing and using the family resources for the purposes desired in the provision of food. Note what value or values you think prompted you and your family to make these decisions. What does your family consider the most important purposes desired from food provision? Can you justify the value or values as consistent with your welfare and the welfare of your family? | Evaluate student's growth in his realization of importance to plan, control, and evaluate the use of resources in the provision of food to attain goals and his ability to take responsibility for the results. |

## Concept F: Quantity cookery.

## Objective F: Appraisal of food preparation and service for a large group in the home.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge**<br>Read about quantity food preparation from text or other references about serving amounts, especially for meats. | |
| The food service industry is large and growing. | Visit school cafeteria to see one type of preparation and service for a large group. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
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| The amount of food to prepare is determined by the size of the servings. | Have purchasing agent or menu planner for school cafeteria talk to class about methods used and criteria met. | |
| Different types of food service have varied goals and require different methods of preparation and service. | Visit a restaurant and have the manager or a cook conduct a tour showing grocery storage and equipment. Observe methods and skills of employees. | |
| | Visit a hospital, senior citizens' home, camp, or other local institution which serves large group meals. | |
| Improper handling of food may result in food spoilage. | Have someone who plans menus for a catering service talk to the group about aims and policies. Watch for a newspaper article about food spoilage resulting from improper handling of food in large quantities. Read articles and/or place on the bulletin board. | Newspaper articles. |
| Federal, state, and local agencies protect food in different ways. | Have local health officials discuss required and desirable health practices in a commercial kitchen. Invite lunchroom manager to display and discuss various record-keeping devices. | |
| | Look at wholesale catalogs for food and equipment. | |
| | Look at institution management magazines. | |
| | **Comprehension** | |
| | Have question and answer session at end of field trip or talk by catering service, restaurant manager, and/or lunchroom supervisor. Compare profit, motive, types of service, economy of preparation, and nutritional values of two types of food service establishments. | Types of questions asked.<br>Class discussion or short papers. |
| | Discuss serving sizes—weigh out suggested serving sizes — observe the difference in bony and boneless meats, heavy and light salads, for example. | |
| | Discuss food poisoning, especially as it occurs frequently with large quantities. | Class discussion. |
| | Prepare bulletin board with menus from different types of situations, banquets, hospital, restaurant, school. | |
| | Bring pictures that suggest suitable ways of serving large groups. | |
| | Bring banquet menus, favors, programs. | |
| | List and discuss differences between formal and informal occasions. | |
| | Discuss differences in food needs for men, women, children, and teens. Class discussion. Discuss basis for recipe multiplication or division. | Class discussion. |
| | Discuss role of portable appliances in home quantity food service: renting or borrowing. | |
| | Study equipment of school cafeteria. | |
| | Discover potential limitations, need for care, refer to manufacturers' brochures. | |
| | Discuss criteria for serving a large group; discuss criteria for setting a buffet table. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Application** | |
| Preparing foods in large quantities is common in many situations. | Brainstorm in class to find uses of quantity cookery—gifts, food preservation, family gatherings, planned leftover foods, church suppers, banquets, food-service employment. | Ideas for use of quantity cookery. |
| The methods used in quantity food service vary with the needs of the occasion. | Ask the class to volunteer to carry out plans for serving refreshments to a group or have several groups within the class help with different projects. | Report to class. |
| | Discuss various methods used in different situations serving large numbers. | Class discussion. |
| The principles of cookery used for family meals can be used for quantity cookery. | Brainstorm on substitute equipment for quantity food preparation and service in the home. | Written or oral brainstorming. |
| | Prepare a large quantity of food for some occasion, such as the salad for the junior-senior banquet. Help serve a school lunch as a class or in groups. | Written plans for preparation. |
| Entertaining large groups in the home requires adaptation of family meal methods. | Given a menu, set up an acceptable order of buffet service for a large group. | Suggested order of service. |
| | **Analysis** | |
| Menus are judged by criteria which vary with the situation. | Discuss school lunch menus listing probable criteria which must be met — cost, ease of preparation, appetite appeal to students, nutritional adequacy. | List of criteria. |
| Larger quantities of foods purchased in a single container are often less expensive than the same quantity in smaller containers. | Compare prices of Number 10 tins and an equivalent volume of smaller cans of foods. Discuss what accounts for cost of a product. | Brief oral or written reports comparing volume variations and/or method of preparation. Class discussion. |
| | Compare frozen with canned products; with fresh products. | |
| The cost of food varies with the method and amount of preparation involved in the product. | Compare meals and menus from different types of eating establishments. Try to discover the predominating goals of each place. | Class discussion. |
| Cost of purchased meals will vary with the quality of service, food, and atmosphere. | Discuss limitations for serving large groups in the home — limited refrigerator space, cooking space, serving and/or seating space, dishes and utensils, time, money. After the occasion, which all have attended, identify good and not-so-good points and the probable causes of success or failure. | Lists of factors and causes or contribution to class discussion. |
| The type of food served to large groups in the home varies with limitations in the home. | List and discuss differences in criteria for judging foods according to style of service — attractiveness of serving platters, color combination on filled plates, texture, and temperature variation. Discuss the contribution of food to various community gatherings, such as fish fries, barbecues. | |
| Certain factors may cause good or poor results when serving larger groups. | | |
| Sets of criteria for judging foods vary with the type of service. | Compile a list of qualifications for a desirable chairman for group dinner and other quantity food projects. | |
| | Think of special committees needed for a group meal. | |
| | **Synthesis — Evaluation** | |
| | Plan menu and make other arrangements for time, buying groceries, for example, for school banquets such as FHA, FFA, Lettermans' Club, or junior-senior banquet. Carry out plans. | Write plans.<br>Write or discuss evaluation of project. |
| The occasion and type of group help to determine the | Make and execute plans in a home, for a large | Use for home experience. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| type of food preparation and service. | group for a holiday, graduation, birthday, or similar group gathering. | Write plans and evaluation. Report to class. |
| | Volunteer to plan, prepare, and serve refreshments to senior citizens' home in the area. Plan and carry out activity suitable for age group. | Write plans and evaluation.<br>Evaluate by class discussion. |
| | Plan gathering for children, such as first graders helping to make cookies and watching them bake, then serve group refreshments using cookies. | |
| | Arrange a series of menus and appropriate plans to be prepared in the home for a specific group situation — Grandmother invites her children and their families for a family reunion July 3, 4, and 5. There will be 26 people of varying ages for eight consecutive meals. | Define situation; write menus. |
| | Plan week's school lunch menu and give reasons for including specific foods. | Written menus; reasons. |
| | Arrange work plan for class if group were to prepare menus planned. | |
| | For National School Lunch Week, prepare displays or bulletin boards showing aspects of the National School Lunch Act. Plan a unique food or decoration for a certain gathering. | |
| | **Evaluation** | |
| Quantity food preparation and service may be improved by the evaluation of management and selection of wise methods. | Given a menu for a particular quantity food service problem in a home, have girls judge choice and suggest alternatives. | Written or oral judgments and suggested alternatives. |
| | Given a time schedule for a particular menu, have girls make suggestions for saving time and energy. | Written or oral suggestions. |
| | Have girls eat in a group situation of their choice; evaluate the menu and any other aspects of the arrangements which are observable. | Home experience: Write evaluation or report to class. |
| | Have girls evaluate group food service situation which they individually attend. | Write or tell evaluation. |
| | Propose improvements in school cafeteria and kitchen. | Write or discuss improvements. |

Concept G: Food preservation.

Objective G: Evaluation of food preservation techniques.

Generalization: Decisions as to the economy of preserving food at home and the techniques used will depend upon the individual situation.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Food preservation includes various techniques of home canning, freezing, drying, salting, and smoking for retaining the quality of fresh food products. | Define all the terms used in food preservation. | Quiz on terms. |
| | Display of equipment needed for various types of preservation. Read in textbooks, extension bulletins, and commercial pamphlets to gain information on history of food preservation, methods, equipment, and actual procedure. | Make a survey of the class members to determine:<br>How many have a garden which supplies an abundance of fruits and vegetables? |
| Food preservation is the method of preserving foods for future use. | Display actual equipment used in food preparation — types of jars, canner, freezer wraps and boxes, pressure cooker. | How many preserve food by freezing?<br>How many have freezers? |
| Food storage and preservation methods are designed | Demonstrate a method of canning relishes. | How many rent lockers? |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| to retain or enhance the initial nutritive value, safety, and sensory qualities of food through the control of natural maturing processes, the growth of contaminating micro-organisms, a variety of chemical reactions, and physical changes. | Demonstration of each of the different methods commonly used today in canning. | |
| | Demonstrate method of freezing with ascorbic acid or other substitute. | |
| | View film, "Why Foods Spoil." Ag. Ext., University of Minnesota. | |
| Freezing is a popular method of preserving left-overs, and the young homemaker would profit by knowing its principles. | Read and discuss the principles of freezing fruits, vegetables, meat, and cooked foods. | |
| | Read a current article on botulism. Discuss the dangers of botulism as related to food preservation. | |
| | Make an exhibit showing good quality of food for freezing. | |
| | Make an exhibit showing various containers suitable for freezing foods at home or at the locker. | |
| | Discuss the merits of each. Make an exhibit showing various wraps suitable for foods to be frozen. | |
| | Discuss the merits of each. Observe demonstration on how to wrap frozen foods. | |
| | View the film, "Treasures in the Making," and the slides, "Jamboree with Frozen Fruits," and "Sure Jell Magic," Ag. Ext., University of Minnesota. Discuss the ideas presented. | |
| | Slides: On the historical background of food preservation up to modern-day methods—"Food Through the Ages," Ag. Ext., University of Minnesota. | |
| | Demonstrate the preparation of fruits and vegetables for freezing. | |
| | Demonstration on the reaction of pectins in fruits; also the addition of artificial pectins. | |
| | Visit a frozen food plant. | |
| | Visit a locker plant to inspect storage facilities. | |
| | Observe demonstration on how to prepare baked foods for freezing. | |
| | **Comprehension** | |
| | Have students prepare charts to show steps in different food preservation procedures. | Evaluation of visual aid. |
| | Discuss the problem of spoilage of foods if not preserved, or preserved incorrectly. Explain equipment needed, its use, care, and safety hazards. | |
| | Discuss causes of spoilage, kinds of products suitable for preservation and best methods to use. | |
| | Discuss the advantages of using frozen foods in meals. | |
| | Discuss best methods of preparing frozen foods before using in the menu — some must be thawed, others cooked frozen. | |
| | Discuss foods which may be frozen and how the freezing reacts on them physically and chemically. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Natural food colors are affected by preservation methods used. | Discuss the use of ascorbic acid or a substitute with regard to food discoloration. | |
| | Discuss the varied containers available for freezing foods. | |
| Micro-organisms and enzymes are agents responsible for changes in food that cause spoilage. | Discuss how pickling is completed by the different seasonings. | |
| | Class reports on origin of each method of food preservation. | |
| | Compare food preservation in colonial days and in our present-day economy. | |
| | Visit the stores and markets in community to discover the foods available for preservation and their cost. | |
| | Discuss how the cost of the foods available would influence the decision to preserve them. | |
| | Make a bulletin board display of cost as found in advertisements. Compare the two costs to see if the homemaker is saving time and money by canning at home. | |
| Serious burns can result from a hot sugar solution. | Discuss the safety factors needed to be followed in working with hot syrups—danger of burns. | |
| | Examine examples of spoilage caused by mold, yeast, and bacteria. Discuss how agents causing spoilage multiply under various conditions. | |
| | Discuss the characteristics of good jelly and causes for failure. | |
| | Demonstrate making jelly with and without the use of commercial pectin. | |
| | Reports from students in class on available fruits and vegetables in local stores that can be used for preservation. From the display of types of jars and lids used in home canning, discuss such factors as convenience, permanence, and cost. | Written test on the principles of freezing, preparing food for freezing, storage. |
| | Visit local stores to examine price, and compare equipment. | Practical test on the selection and use of wrapping and containers for freezing. |
| | Discuss the basic principles of canning. | |
| The quality of food is retained but not improved in process of preservation. | Study directions for preserving various kinds of foods. Work out simple rules to follow. Discuss problems of canning foods, such as cooling, testing, and loss of liquid in processing. | |
| | Compare the cost of buying and maintaining a home freezer to renting a locker. | Prepare a system of keeping an inventory of foods put into and taken out of your freezer at home. |
| | Discuss various values to be derived from use of freezer. | |
| | Discuss the use of paraffin for sealing, safety precautions to be taken in using it. | Using a box or book, demonstrate how to wrap for freezing. |
| | Discuss qualifications of foods for freezing. | |
| | List foods which are most satisfactorily frozen. | |
| | List foods which may change in flavor or texture by being frozen. | |
| | List foods for which it would not be economically sound to take freezer space. | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Discuss the effects of low temperatures, acid-salt concentrations on spoilage agents.<br>Discuss the relationship between the principles involved in food spoilage and the principles of food preservation.<br>Practice with different freezer wraps.<br>Discuss reasons and methods of careful and complete labeling.<br>Plan a home experience related to freezing foods.<br>Make a checklist for rotating the food supply in the locker or freezer to make maximum use of space.<br>Students prepare a bulletin board display of literature and agencies available for keeping homemaker up-to-date on food preservation—extension bulletins, commercial publications.<br>Student reports: Suggested ways of taking inventory and keeping records of food on hand.<br>Future developments in food preservation.<br>"Plan your freezing when you plan your garden." Student enrolled in 4-H garden project would be good for this. | |
| | **Application** | |
| The amount of food preservation today's homemaker does, depends upon availability and cost of the food product, ability and time of the homemaker, family preferences, and personal satisfaction. | Unit preparation of different foods by each method.<br>Plan a laboratory experience in the preservation of jams, jellies, or preserves.<br>Students freeze leftovers for future use. | Evaluation of laboratory techniques and finished product. |
| The type and amount of foods preserved will be greatly affected by the economy, locality, and the need. | Compare costs in small-scale buying for immediate use and large-scale buying for freezing.<br>Compare cost of home frozen foods with commercially frozen foods.<br>Compare the cost of sales articles to home-prepared products—quality-wise, money-wise, and time-wise. Test jars or cans for a good seal. | Evaluation of comparison sheet. |
| The quality of the food selected for preservation determines the quality of the final product. | Make a study on how much it costs to can foods at home by canning and freezing.<br>Demonstration by the teacher on how a pressure cooker may be used for canning and then the students actually doing the preserving. | |
| Successful preservation of foods requires the destruction of micro-organisms and enzymes or delaying their growth. Natural chemical changes occur during the storage of canned foods. Storage conditions affect the retention of quality in canned foods. | Plan a laboratory and use the pressure cooker for a canning device.<br>Demonstration of how foods are prepared by blanching; example, peaches, tomatoes.<br>Have students figure the amount of canned or frozen foods of various types needed by their family in one year. Compare the amount with the amount actually canned or frozen in home. Report the results to class and decide upon factors which should determine the amount of canning done. | |
| Canning equipment in good condition facilitates the canning procedure. The speed | Prepare jelly or jam by the regular method; by using commercial pectin. Use the same amount of | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| and efficiency of the canning procedure depends upon the condition of the canning equipment. | juice for each batch. Compare the amount of jelly secured, the quality and cost of each glass.<br>Prepare jelly and jam using frozen and bottled juices; frozen fruits. | |
| The amounts and kinds of ingredients used help to determine the qualities of the finished product. | | |
| | **Analysis** | |
| Food preservation techniques can be adapted to meet a variety of home situations. | Compare the cost of home-prepared jams, jellies, or preserves.<br>Analyze the chemical reaction of foods to canning and freezing. Compare the costs of canning and freezing; equipment needed and other materials used.<br>Take part in a debate on the "Pros and Cons in Home Freezing." | |
| Home preserved food may be utilized to supplement commercially preserved foods. | Determine what and how much food should be frozen for each member of the class and record data.<br>Write a paper about the factors to be considered in making a decision to can or not to can. Point out possible false economy. | |
| | Devise a score card for judging the preserved product. | Evaluation of score card. |
| | Analyze cost of home food preservation and calculate amount of income saved. | |
| | **Synthesis** | |
| Preserving food at home may contribute to the health and happiness of the family, and save time, energy, and money for the homemaker. | Use score card for judging preserved products.<br>Demonstration by student on her own of a "Freezer Meal." | |
| | **Evaluation** | |
| | Taste comparison of different methods of preservation.<br>Do a home project in freezing and bring a statement as to its success to class. | |

Concept H: Use and care of appliances.

Objective H: Perception of the effect of special equipment on meal planning and preparation.

Generalization: Appliances may be utilized to do much of the preparation when planning and preparing meals.

Concept 1: Use and care of freezers.

Objective 1: Perception of the effect of different ways of freezing upon the end product.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Freezers can be purchased to fit a variety of needs. | Read use and care manual for care instructions as suggested for general appliances. Particular attention should be given to directions for:<br>Installation requirements<br>Safety signal light<br>Defrosting<br>Periodic cleaning | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | Study data to determine features available on specific models. | |
| | **Comprehension** | |
| Freezers correctly used can save both time and money. | Restate in own words correct information relating to:<br>Correct temperature for food storage<br>Factors relating to maintenance of correct storage temperature<br>Foods compatible with freezing<br>Correct preparation of foods for freezing<br>Safe storage periods for specific foods<br>How to plan for freezer management<br>Correct procedure in case of power failure<br>When to refreeze foods. | Oral and written report. |
| | Decide upon care techniques appropriate to home or class appliances. | |
| | **Application** | |
| | After discussion of the data read, predict ways in which food may be prepared to save time. Interpret data concerning storage of foods so it may be applied to economical purchasing of food. | Quiz. |
| | Package soup for freezing in two one quart containers. Allow ¼" headspace in one and 1" in the other. Freeze. Observe in four days. | |
| | Freeze loaf of bread in store wax-paper wrapping. Overwrap identical loaf in correct freezer wrap, properly sealed. In two weeks thaw and observe. | |
| | Package one layer cake correctly, molding wrapping to product so all air is excluded. Seal correctly. Seal an identical cake in loosely fitting plastic bag. Thaw in two weeks and observe. | |
| The care and safe operation of an appliance depends upon its purpose and construction. | Prepare a paper giving care techniques applicable to a specific model of freezer in students' homes or in classroom. | Written report. |
| | Prepare "Planned ahead" foods for freezing. Line casseroles with freezer-weight foil to obtain maximum casserole usage plus ease in future preparation. | |
| | **Analysis** | |
| | Observe soup for seal breakage. Compare bread for freezer burn. Compare cake for frost build-up and freezer burn. | Oral or written report. |
| With correct care, a freezer will provide many safe hours of efficient and economical operation. | Compare care suggestions. | |
| | Apply knowledge gained from reading and from experimentation to predict ways in which a freezer can be used creatively, economically, and effectively. | Discussion. |
| | **Synthesis** | |
| | Select correct procedures for preparation of food for freezer giving reasons for selection. | Test. |
| | Select care techniques to be accepted as class procedure. From data presented select as many preventive techniques as possible so appliance may be kept in excellent condition with a minimum of cleaning chores. | Test.<br>Teacher observe student care practices throughout the year. |

**Concept 2: Automatic or programmed oven cookery.**

**Objective 2: Perception of the versatility of performance of major appliances.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| Modern ranges offer a choice of kinds of program cooking. | Read information concerning Program Cooking. | Report. |
| | A.<br>Two temperature-control automatic cookery. Three step operation, Delay start, Cook and hold, Keep warm. | |
| | Electric — Deluxe Waste-King Universal | |
| | Gas — Deluxe Waste-King Universal<br>Deluxe Whirlpool Universal<br>Roper Charm | |
| | B.<br>Single temperature control, but three step operation. Delay start, Cook and hold, Tappan — gas. | |
| | C.<br>Single thermostat — two steps — Cook and hold, Keep warm. | |
| | Electric — Preway, Modern Maid, Kenmore. | |
| | Gas—Magic Chef, Roper, Hardwick, Carloric, R.C.A., Whirlpool.<br>(Some models of each.) | |
| | D.<br>Automatic — Delayed start, Cook, Turn off.<br>Semi-automatic — Cook, Turn oven off. | |
| | Electric — Every manufacturer has some models.<br>Gas — Every manufacturer has some models. | |
| | **Comprehension** | |
| | Describe the differences between these automatic cookery processes. | Discussion. |
| | **Application** | |
| Properly chosen and correctly used major appliances can economically and effectively perform homemaking tasks. | Use the clock timed outlet and a night light to demonstrate the automatic and semi-automatic oven settings. Or, set the controls and advance time of day clock, observe glowing of the signal light to indicate when oven is on and off. | Record. |
| | Mock-up cardboard controls could be used to demonstrate settings for program cooking. | |
| | **Analysis** | |
| Automatic cookery can produce excellent products and give the user many free hours of leisure. | Compare and discuss different types of automatic cookery. Consider advantages and disadvantages. | Discussion. |
| | **Synthesis** | |
| | Decide which procedures would be most useful to homemakers since this feature is usually not compatible with class work. Predict how homemakers could effectively use this feature. | |

Concept 3: Low temperature oven feature.

Objective 3: Perception of the uses of the low temperature oven feature.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Application** | |
| | A | |
| **The low temperature oven feature is frequently underused by homemakers.** | **Set oven temperature at 155 degrees. Place one package of frozen vegetables in the oven to thaw. Do not saran wrap. Place an identical package at room temperature. Observe time required.** | **Record.** |
| | B | |
| | **Set oven temperature at 170 degrees. Freshen baked goods by reheating. Loosely wrap baked product and heat until as warm as desired. Compare with unheated.** | **Observe.** |
| | C | |
| | **Set oven at 170 degrees. Avoid putting silver in oven. Pre-heat oven for dishwasher washable plastics. Warm plates from 10 to 20 minutes. Use hot pads and avoid cold surfaces.** | **Observe.** |
| | D | |
| | **Set oven temperature at 140 degrees. Possible only on gas ovens — electric at 150 degrees. Place spices, herbs, corn, flowers, on aluminum foil. Turn occasionally until dry.** | **Observe.** |
| | E | |
| **The low temperature oven substitutes manually for a cook and hold feature.** | **When food has completely cooked, turn off oven and open oven door for 10 minutes. Close door and set oven for 170 degrees. Or if desired, shorten cooking time 15 minutes and let oven cool with door closed, then reset to 170 degrees. Hold food up to 4 hours. Compare results at 1½ hours and at 4 hours.** | **Record results.** |
| | **Analysis** | |
| **An understanding of the capabilities of an appliance may aid in a more creative and effective use by the homemaker.** | **Compare results for applications made. Examine and compare actual use to possible use of appliances at home or in the classroom.** | **Comparisons made.** |
| | **Synthesis** | |
| | **Decide on most appropriate uses for low temperature oven.** | |

Concept 4: Use of the rotisserie.

Objective 4: Perception of the effect upon time management with the use of a rotisserie.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Application** | |
| **When the broil unit provides heat for rotissing, cooking time is shortened.** | **Use canned spam with a barbeque sauce, two electric and two gas ovens. Roast one spam in each gas and electric oven. Place other spam on rotisserie spits for the remaining gas and electric ovens. Follow temperature settings specific to each range. Insert portable meat thermometers into each spam to determine the correct degree of doneness. Use 170 degrees.** | **Chart of results.** |
| | **Analysis** | |
| **Appliances which are versa-** | **Compare time necessary for rotissing and for roast-** | **Discussion.** |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| tile and convenient may fill a need so effectively that they will be used more frequently. | ing to produce the same degree of doneness. Relate to the heat provision for the rotissing. | |
| | **Synthesis** | |
| | Formulate a generalization concerning the time involved in roasting and rotissing, relative to the heat source. | Quiz. |

## IV. Major Concept: Careers related to food preparation.

**Broad Objective IV: Perception of careers in the food service industry.**

**Broad Generalization: Various careers in food service are available for persons with appropriate qualifications.**

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | **Knowledge** | |
| With increased leisure time, greater incomes, and additional persons working further from home, food service is a growing business. | Invite someone from a local employment service to discuss current employment needs in food preparation. | |
| | Invite someone from Vocational Education and/or Manpower to discuss employment for women, especially in areas of food preparation. | |
| | Read and report on articles written about the employed mother. | Reports. |
| Whether a mother is employed or a full-time homemaker is the decision of each family. | Have panel discussion by mothers who are homemakers with and without children, various ages of children, and unmarried women who are working in an area of food service. | |
| Training is advantageous for food service workers. Individual interests and abilities can be considered when the business is large enough for specialization. | Invite a resource person who teaches a course in training food service personnel to talk to class. | Reactions to resource persons — written or class discussion. |
| | Visit an establishment which employs food service workers and ask the manager to talk to the group about various positions, or have him or the personnel director come and talk to the class. | |
| | Study history of food service and compare with its importance today. | Short memory quiz. |
| Some individuals are better qualified for food service work than others. | Read about general qualifications for food service personnel. | |
| | See filmstrips or films about various careers in food service. "Take a Good Look," Assn. Films. Careers in dietetics. | |
| | Study labor laws which may affect the food service industry. | |
| | Read career bulletins from ADA, SRA, Restaurant Assn., articles in *Coed* magazine or *Forecast*, and occupational briefs from the U.S. Dept. of Labor. | |
| | **Comprehension** | |
| | Have question and answer session after each talk by resource person. | Types of questions asked. |
| | Discuss articles written about the employed mother. Distinguish between values and factual statements. | Class discussion. |
| | Each girl might study a specific area of food service work. She could prepare an oral or written report | Oral or written reports. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | about personal qualifications, education or training necessary, job openings, and compensation. | |
| | Discuss findings after research work. | Class discussion. Role playing. |
| | Role-play various positions in food preparation and service to comprehend relation of various positions. | |
| | Separate general qualifications into classifications of personal qualifications, educational qualifications, and experience qualifications. | Appropriateness of classifications and qualifications. |
| | **Application** | |
| Principles of food preparation are applied when working in a food service business. | Locate food preparation establishments which may allow students to gain limited experience by helping in their business—either after school, during the summer, or for special times when additional personnel is needed. Help with food preparation and service in the school cafeteria. Help to prepare large quantities of food for an occasion such as a tea or banquet. | Talk with employers or have girls talk with employers as to acceptability and progress.<br>Same as above. |
| | **Analysis** | |
| Labor laws may affect workers in the food service industry. | Role-play or have a panel discussion on employer-employee or employee-employee relationships and how they may affect the food business. | Role-playing or discussion. |
| | Explore unionism and how it affects each of several specific food careers. | Discussion or written report. |
| Time, money, and energy must be planned around a job. | Compare budgets of families with working and non-working mothers. | Discussion or written report. |
| | Compare time plans of working and non-working mothers. | Discussion or written report. |
| The connotations of the title may play a part in the desirability of the position. | Compare the terminology of "Cook" to "Food Service Specialist." | Discussion or paper. |
| | Discuss the probable advantages of taking a course in food service before seeking employment. | Discussion. |
| | Compare policies of several types of food service or of specific establishments. | Discussion or written paper. |
| | List qualifications of various types of food service workers and analyze why each is important. | Discussion or written lists. |
| Qualifications of food service workers determine the positions they may acquire and the responsibility delegated to them. | Compare qualifications and responsibilities for two types of food service workers. | Class discussion. |
| | Compare the working mother of today with the working mother of Great Grandmother's day—goals, family attitude, home management, education, compensation. | Class discussion or written comparison. |
| | **Synthesis** | |
| | Write a paper: *Why Cooking* (or some aspect of it) *Appeals to Me as a Career.* | Paper. |
| The food service industry may expand in the future. | Discuss and brainstorm on possible and probable roles of food service in the future. | Discussion or theme. |
| | Have sections of the class form amateur catering groups to help people in the community with parties. | Written or oral evaluation of projects. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| At a job interview, a person may learn what the management will expect from the employee and what the employee may expect from management. | Think of more pleasing titles than "Fry Cook," "Dishwasher," "Pastry Cook," and others. | Discussion or written ideas. |
| | Discuss what a potential food service employee might expect to learn in a job interview. | Discussion or paper. |
| A student may expect to learn generalized content which may help him to be a good food service worker. | Discuss what a food service worker might expect to learn in a food service course offered at a vocational school or professional institution. | Discussion or paper. |
| Plans for meals will vary with the situation. | Prepare meal plans for specific food service situations. | Meal plans and class discussion on plans; written explanation and/or justification on meal plans. |

# APPENDIX

## Reference, Teaching Aids, and Suggested Equipment

## TEACHING FOODS ON THE MEAL BASIS

Teaching foods on the meal basis involves the following steps for each meal covered.

1. Introduction of meal pattern
2. Study — discussion of foods involved, techniques, principles, and equipment
3. Demonstration if needed
4. Planning of laboratory
5. Pre-preparation if needed
6. Preparing and serving a meal
7. Evaluation of meal and content covered

### Meal Patterns

The suggested learnings for the first three or four levels may be incorporated into menus for teaching the concept of three meals a day. At each grade level, the planning, preparation, and service of all three meals will be included in the work. The students with the aid of the teacher may develop meal patterns using the foods in the suggested scope, such as the following for Grade 7.

Fruit juice
Toast
Beverage

Relishes
Sandwich
Jello, Cookie
Beverage

Hamburger
Canned/frozen vegetables
Fresh fruit salad
Brown and serve rolls
Crumb crust with pudding filling
Beverage

### Planning Guides

Planning guides, such as a Meal Planning Work Sheet, are a very valuable help. Students could benefit from working with the teacher in developing a planning guide. A sample of such a guide is on the following pages.

## MEAL PLANNING WORK SHEET

Date ____________________ Meal to be served ____________________

**Emphasis on:**

**Cost Level:**

**(determined by teacher and students, depends on dept. budget and family incomes in community)**

**Family**

1.

2.

3.

4.

| Meal Pattern Used | Menu to be Served | New Learnings |
|---|---|---|

**Recipes (list source)**

**Groceries**

| Staples | Cost | Dairy Products | Cost | Meat and Veg. | Cost |
|---|---|---|---|---|---|

**Shoppers:**

**Centerpiece or interest:**

**Linen:**

**Silver:**

**Dishes:**

**Special equipment needed:**

## Pre-preparation (on day before serving meal)

| Duty | Name | Time |
|---|---|---|

## Preparation

| Duty | Name | Time |
|---|---|---|

## Clean-up

| Duty | Name | Time |
|---|---|---|

## Menu for balance of day

| | |
|---|---|
| **Meal:** | **Meal:** |
| **Menu—** | **Menu—** |

## Suggested Levels for Learning in Food Preparation*

This chart classifies foods into four levels. It is not anticipated that all of the foods in any one level would be prepared in a given year.

| I | II | III | IV |
|---|---|---|---|
| BEVERAGES | | | |
| Fruit juices | Cocoa | Appetizer | Punch |
| Milk | Tea | | |
| Instant cocoa | Coffee | | |
| QUICK BREADS | | | |
| Toast and variations | Muffins | Popovers | Yeast breads and variations |
| Frozen rolls/breads | Biscuits | Loaf | |
| | Pancakes/waffles | Corn bread | Doughnuts |
| CAKE | | | |
| Mixes | Buttercakes | Sponge/Angel | Fruit cakes |
| | | Chiffon | Tea Cakes |
| CANDY — Sugar Cookery | | | |
| Popcorn balls | Uncooked fudge | Cooked fudge | Cooked brittles |
| Cereal candy | Powdered sugar/packaged frosting | Boiled frosting | Fondant |
| CEREALS | | | |
| Ready to serve | Cooked (casserole base) | Macaroni | |
| | | Spaghetti | |
| COOKIES | | | |
| Mixes | Drop, bar | Rolled | |
| Macaroons | Refrigerator | Pressed | |
| DESSERTS — Cooked, Baked, Frozen | | | |
| Instant puddings | Baked custard | Ice cream—variations | Cream puffs |
| Pudding mix | Frozen custard | | Tortes |
| Fruit ice | Sherbet | | Steamed puddings |
| | | | Parfait |
| EGGS — Cheese, Meat | Scrambled and variations | Omelets | Souffle |
| Extenders | French toast | | Croquettes |
| Cooked | Casseroles | | |
| FRUITS | | | |
| Raw fruit | Dried, Whips | Salads | |
| Baked fruit | Sauces | | |
| GELATIN | | | |
| Jello | Molded salads | Bavarian cream | Chiffon pie |
| | Whipped jello | | Parfait pie |
| MEATS | | | |
| Bacon | Ground meats | Roast, broil | All kinds and methods of preparation |
| Wieners | Canned fish | | |
| Hamburger | | | Game |
| PASTRIES | | | |
| Crumb crust | One crust | Two crust | Tarts, Puff |
| SALAD DRESSINGS | | | |
| Commercial | Commercial with variations | Mayonnaise | Cooked |
| | | French | |

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*Adapted from studies done in Colorado, Missouri, Nebraska, Michigan, and Wisconsin.

| I | II | III | IV |
|---|---|---|---|
| **SALAD** | | | |
| Relishes | Tossed, Fruit | Vegetable and combinations | Salad plates<br>Frozen |
| **SANDWICHES** | | | |
| Regular | Grilled | French toast | Party type |
| **SOUPS** | | | |
| Canned, frozen, dried | | Creamed vegetable | Consomme |
| **VEGETABLES** | | | |
| Raw | Boiled | Baked, Scalloped | Glazed |
| Canned | Creamed | Broiled | Deep fat fried |
| **FOOD PRESERVATION** | | | |
| | Freezing-prepared foods | Freezing fruits, vegetables<br>Preserves, jellies, jams | Complete meals |
| **NUTRITION** | | | |
| Basic 4 | Food nutrients | Relationship of nutrients to personal and family needs | Special problems |
| **MEALS** | | | |
| 5 Weeks | 6-8 Weeks | 8-9 Weeks | 9 Weeks — 1 Semester |
| Snack | (one day's meals) | (Two day's meals) | Company breakfast |
| Light Breakfast | Moderate Breakfast | Breakfast | Buffet luncheon or special occasion |
| Light Lunch | Lunch | Oven dinner | Dinner using fowl |
| Light Dinner | Dinner | | |
| | | Brunch | Special diet meal |
| | | Supper | Dinner using less tender cut of meat |
| | | Late snack | |

## DIVISION OF WORK

The following plan is a suggestion for dividing the laboratory responsibilities of four girls. Adjustments will need to be made if the "family" size varies.

| | Girl One | Girl Two | Girl Three | Girl Four |
|---|---|---|---|---|
| Planning | Assists with group planning | Assists with group planning | Fills in group plan | Assists with group planning |
| | Makes own plan | Makes own plan | Makes own plan | Makes own plan |
| Preparation and Service | | Prepares main dish | Prepares fruit, salad, or dessert | Secures supplies |
| | Responsible for family grace | Acts as hostess | Sets table | Prepares vegetable dish or helps with main dish |
| | | | | Acts as waitress |
| Clean-up | Prepares dishes and utensils for washing | Clears table | Dries dishes and puts them away | Washes dishes and does needed cleaning |
| | | Does general housekeeping | | |
| Evaluation | Assists with group evaluation | Marks family record sheet | Assists with group evaluation | Assists with group evaluation |

## MEAL EVALUATION

**Kitchen Number** ______________________ **Type of Meal** ______________________

**Family Members** ______________________ **Type of Service** ______________________

**Directions: Check in the proper column your evaluation of the various aspects relating to the meal just completed.**

| | Need to Improve | Satisfactory | Good |
|---|---|---|---|
| **FOOD SELECTION AND PREPARATION** | | | |
| Meal well-balanced | | | |
| Variety in color, texture, flavor | | | |
| All foods done at the same time | | | |
| Foods served at correct temperature | | | |
| Foods attractively served | | | |
| Cost reasonable | | | |
| Members cooperated | | | |
| Work habits — neat and clean | | | |
| **MANAGEMENT** | | | |
| Work done efficiently | | | |
| Work divided evenly | | | |
| Used tray | | | |
| Adequate pre-planning | | | |
| Cooperation | | | |
| Clean-up | | | |
| Finished on time | | | |
| Kitchen orderly | | | |
| **MEAL SERVICE AND ETIQUETTE** | | | |
| Waitress performed duties | | | |
| Hostess performed duties | | | |
| Conversation at meal | | | |
| Correct use of eating utensils | | | |
| Proper type of service | | | |
| Service carried out correctly | | | |

## Suggested Equipment for Unit Kitchens*

The following equipment is recommended in each unit kitchen if maximum efficiency is to be attained:

A. Suggested Small Equipment

1. Preparation Center

- flour sifter
- rolling pin
- baking sheets
- pastry blender
- juicer
- shredder or grater
- layer cake pans
- square cake pan
- pie pan
- loaf pan
- muffin pan
- casserole
- refrigerator dishes
- mixing bowls
- custard cups
- tray
- set of measuring spoons
- set of metal measuring cups
- glass measuring cup
- wooden spoon
- 3 sharp knives, varied sizes
- spatula
- egg beater
- can opener
- pastry brush
- biscuit cutter
- cookie cutters
- salt and pepper shakers
- rubber scraper
- waxed paper
- metal foil
- paper towels
- flour container
- sugar container
- shortening
- salt, pepper
- spices
- baking powder
- soda
- flavorings

2. Cleaning Center

- garbage can, if no disposal unit
- dish rack tray
- service trays
- one set of mixing bowls
- gelatin molds
- tea pot
- coffee maker
- water pitcher
- sieve
- measuring cups
- measuring spoons
- cutting knives
- rubber scraper
- vegetable scissors
- vegetable brush
- dish towels
- dish cloths
- soap, scouring powder, scouring pads
- paper towels

Service for six —

- dinner or luncheon plates
- salad & bread & butter plates
- cereal bowls
- cups and saucers
- water glasses
- juice glasses
- sherbets
- knives, forks, teaspoons, salad forks, soup spoons
- 1 platter
- 1 or 2 vegetable dishes
- creamer and sugar
- salt and pepper shakers
- serving spoons

3. Cooking and Serving Center

- roasting pan
- skillet
- saucepans
- cake racks
- (serving dishes—stored here)
- double boiler
- spatula—pancake turner
- holders
- paper napkins
- place mats
- ladle
- tongs
- wooden spoon

B. Equipment Which May Be Shared

- meat thermometer
- candy thermometer
- salad molds
- electric mixer
- angel food cake pans
- food preservation equipment
- utility cart
- step stool
- food grinder
- bread or cutting board
- electric blender
- electric fry pan
- pressure saucepan
- cookie press
- doughnut cutters
- punch bowl
- serving plates
- deep fat fryer
- table linens

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*Compiled from *Space and Equipment for Homemaking Programs*, Div. of Voc. Ed., Misc. No. 9.

## NATIONAL STANDARD CHECK LIST FOR TEACHING HOME SAFETY

**Prepared by the Sub Committee of the Joint Safety Committee of the**

**AMERICAN VOCATIONAL ASSOCIATION AND NATIONAL SAFETY COUNCIL**

**Draw a circle around the appropriate letter, using the following letter scheme:**

**A — Always** **N — Never**
**S — Sometimes** **O — Opportunity**

**In the spaces provided at the end of each section, add other practices or conditions which will make your department and home a safer place.**

### WHEN I COOK

**I DO**

**A S N O 1. Use flat-bottomed and well-balanced cooking utensils.**

**A S N O 2. Keep inside of copper utensils clean and bright, outside, too, of course.**

**A S N O 3. Handle enamelware carefully — if cracked or chipped, flakes of the vitreous enamel can get into food.**

**A S N O 4. Never set hot glassware on cold or wet surfaces.**

**A S N O 5. Avoid using ceramicware if the glaze is cracked — dirt, fat, and moisture may be absorbed and create an unsanitary condition.**

**A S N O 6. Avoid using inexpensive sheet tin-plated utensils which have sharp corners and raw edges exposed.**

**A S N O 7. Turn handles of cooking utensils inward on top of range but not projecting over other lighted burners or pilot light and on work areas so they will not be knocked off and contents spilled.**

**A S N O 8. Handle hot pans with dry pot holders or mitts — never a dish towel.**

**A S N O 9. Check handles of utensils to be sure they are securely attached.**

**A S N O 10. Drain cooked foods by holding kettle with one dry pot holder and the cover with another holder.**

**A S N O 11. Remove lid from hot cooking utensil by lifting the far side first so steam is directed away from me.**

**A S N O 12. Have working area on each side of surface units for easy serving — also to avoid tipping and spilling contents of utensils while cooking.**

**A S N O 13. Avoid carrying pans filled with hot food or liquid across the kitchen.**

**A S N O 14. Reduce heat under utensils as soon as cooking temperature has been reached.**

**A S N O 15. Fill pan only one-third full of fat when deep-frying.**

**A S N O 16. Dry food thoroughly before deep-fat frying so water will not cause fat to spatter.**

**A S N O 17. Use kitchen tongs to turn frying food or to remove food from hot water.**

**A S N O 18. Watch fat carefully or set thermostat when frying to prevent overheating.**

**A S N O 19. Keep knives sharp so strong pressure is unnecessary.**

**A S N O 20. Use knife with sharp edge away from body.**

A S N O 21. Wash and dry knives separately, never leaving them in the dishpan or under water.

A S N O 22. Store knives carefully, preferably in slotted racks.

A S N O 23. Use proper opener for cans, jars, and other containers — never a knife.

A S N O 24. Use a can opener that leaves a smooth edge.

A S N O 25. Work slowly when opening a vacuum can with a key to prevent snapping of the sharp metal band.

A S N O 26. Dispose of sharp metal and broken dishes or glasses in well-wrapped package.

A S N O 27. Follow manufacturers' directions carefully when using pressure cooker, bakeware, electrical appliances, for example.

A S N O 28. Use a rubber scraper in the electric mixer bowl when the mixer is operating, never a metal or wooden spoon, fork, or spatula.

A S N O 29. Use a stomper, not fingers, for pressing food into chopper.

A S N O 30. Keep vent tube of a pressure cooker open — if clogged, use a cleaning wire to open it.

A S N O 31. Stand to one side when lighting a gas oven — first opening the oven door for a few minutes, then lighting match before turning on the gas.

A S N O 32. Have the oven thermostat checked if cakes do not bake in the time specified by the range manufacturer.

A S N O 33. Have kitchen arranged so large appliances and equipment do not protrude and cause bruises or falls.

A S N O 34. Keep work surfaces orderly during preparation of food.

A S N O 35. Close cupboard doors and drawers carefully, and keep them closed when not in use.

A S N O 36. Read directions before using pressure canner.

A S N O 37. See that gauge, safety valve, and petcock of pressure canner are operating properly.

A S N O 38. Use standard glass containers especially made for home canning.

A S N O 39. Pack jars loosely in pressure canner or water bath canner.

A S N O 40. Always lift far side of cover of pressure cooker or canner to allow steam to escape safely.

A S N O 41. Use tongs when removing jars from canner. Check tongs first to be sure they are in good condition.

A S N O 42. Never can by oven method because of danger of explosion.

A S N O 43. Melt paraffin in a double boiler to prevent overheating.

A S N O 44. Wear well-fitted tailored garments when cooking — never loose-fitting clothes with flowing sleeves or ties, or projecting pockets and bows which might catch on equipment.

A S N O 45. Wear canvas work gloves when rearranging the freezer or handling dry ice.

A S N O 46. Have adequate lighting over all work centers.

Name____________________

## LET'S EVALUATE OUR MEAL

| Did we: | Circle one: | | | | |
|---|---|---|---|---|---|
| | P | F | G | Exc. | Comments |
| 1. Serve a well-balanced menu? | 1 | 2 | 3 | 4 | |
| 2. Arrange table and food attractively? | 1 | 2 | 3 | 4 | |
| 3. Set the table correctly? | 1 | 2 | 3 | 4 | |
| 4. Serve well-cooked and seasoned food? | 1 | 2 | 3 | 4 | |
| 5. Serve enough food? | 1 | 2 | 3 | 4 | |
| 6. Have too many leftovers? | 1 | 2 | 3 | 4 | |
| 7. Save leftovers with a plan for future use? | 1 | 2 | 3 | 4 | |
| 8. Make a good work plan so we could serve on time? | 1 | 2 | 3 | 4 | |
| 9. Follow the work plan? | 1 | 2 | 3 | 4 | |
| 10. Keep our work surfaces neat as we worked? | 1 | 2 | 3 | 4 | |
| 11. Keep ourselves neat as we worked? | 1 | 2 | 3 | 4 | |
| 12. Wash cooking dishes as we worked? | 1 | 2 | 3 | 4 | |
| 13. Cooperate well as a family group? | 1 | 2 | 3 | 4 | |
| 14. Each do our share of the work? | 1 | 2 | 3 | 4 | |
| 15. Leave our kitchen neat and in order? | 1 | 2 | 3 | 4 | |
| 16. Use good table manners? | 1 | 2 | 3 | 4 | |
| 17. Have a good table conversation? | 1 | 2 | 3 | 4 | |

Things we learned in preparing this meal:

Our greatest difficulty which we would like to improve upon in our next meal is:

# So You are Cooking

## SELF EVALUATION FOR FOODS LABORATORY

Check yourself on each of the following items. If you feel that you carried out the item satisfactorily, place an X in the box provided. Keep this record for all of your laboratories to check on your improvement.

| Dates: | | | | | | |
|---|---|---|---|---|---|---|
| 1. I was ready for class on time. | | | | | | |
| 2. My hands and nails were clean. | | | | | | |
| 3. I wore a clean apron. | | | | | | |
| 4. I put my personal things in the proper place. | | | | | | |
| 5. I was neat about my work. | | | | | | |
| 6. I assembled the necessary items before starting to work. | | | | | | |
| 7. I cooperated with my group. | | | | | | |
| 8. I gave attention to directions. | | | | | | |
| 9. I used my time well. | | | | | | |
| 10. I left things clean and in their proper place. | | | | | | |
| 11. I had my work well planned. | | | | | | |
| 12. I worked quickly. | | | | | | |

The habits I need to improve are:

## DEMONSTRATION CHECK LIST

| Yes | No | | Comments |
|---|---|---|---|
| | | Is my introduction stimulating? | |
| | | Are my objectives set up clearly for myself and for the pupils? | |
| | | Have I thought through the logical sequence and developed each step fully? | |
| | | Are all of my techniques acceptable? | |
| | | Am I sure I know how to use all of the equipment? | |
| | | Have I practiced so I know my time limitations? | |
| | | Do I have sufficient accurate background information so my pupils will have confidence in me? | |
| | | Do I know further sources of information for my pupils? | |
| | | Are my visual aids ready and adequate? | |
| | | Does this demonstration lend itself to pupil participation? | |
| | | Am I sure of the spelling and pronunciation of key words? | |
| | | Is my vocabulary adequate and acceptable? | |
| | | Can I back up my techniques and procedures with good reasons? | |
| | | Is my demonstration correlated with further pupil activity? | |
| | | What concrete information can my pupils take with them? | |
| | | Have I made provision for cleaning up? | |

My points for the summary are:

1.

2.

3.

4.

5.

## BULLETIN BOARD IDEAS

A. "Nature's Most Perfect Food"—The idea is to emphasize the value of milk as a source of vital food nutrients.

Procedure: Place an empty milk carton in the center of the bulletin board. If a carton is not available use a picture of a bottle of milk. To the right and left of the milk carton arrange the names of the nutrients which are abundant in milk. Ribbons or tapes may be used radiating from the carton to the food nutrients named so as to help tie the picture together and help clarify the ideas to be put over. Arrange the title on the board as desired.

B. "Wise Food Selection for a Healthy Body"—The purpose is to encourage better food selection in the school cafeteria.

Directions: Draw a school cafeteria counter and mount it on contrasting construction paper. Place the counter in the center of the bulletin board. From magazines or other sources cut out food pictures, such as salads, milk and sandwiches, of appropriate size to arrange on the counter. These food pictures should be colored so as to attract attention. Using pipe cleaners, construct two or three figures who are small enough to be in scale with the cafeteria counter. Cloth skirts or trousers may be glued to the pipe cleaner figures. Attach them to the board so that they appear to be passing along the counter selecting their lunches.

C. Climb to Good Health—In a study of food selection this bulletin board idea may be used to introduce the Basic 4 food groups to a beginning class in homemaking.

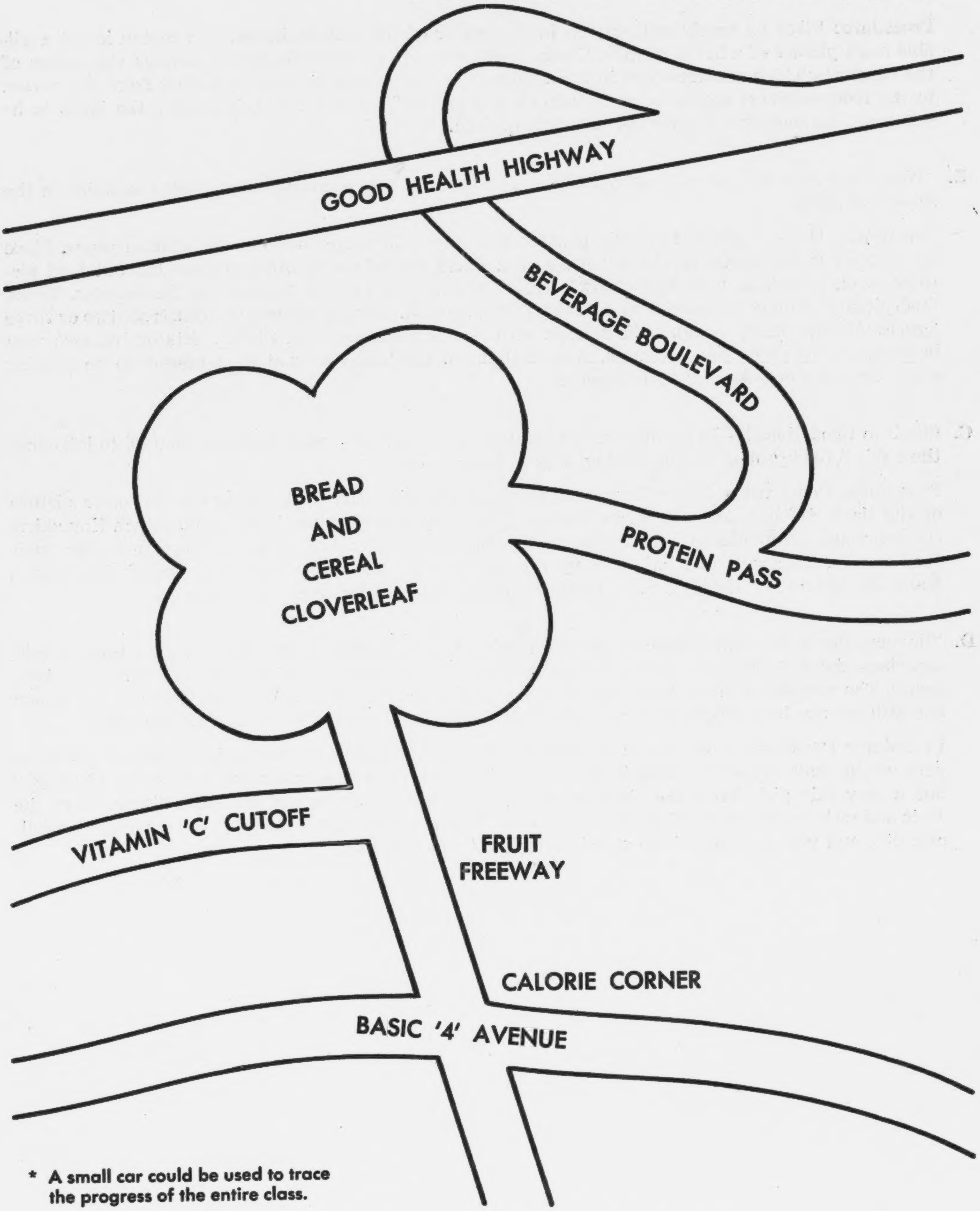
Procedure: Construct a ladder from thin pieces of wood or from thick cardboard. Cut out a picture of the Basic 4 foods. Make two pipe cleaner figures by bending pipe cleaners and attach tiny skirts cut from cloth. Now place the ladder in the boards, center with the ladder leading up to the basic food groups. Place one girl half way up the ladder with the other just approaching the ladder. Make the letters for the title from material like that used in making the ladder.

D. "Balance the Scale with Balanced Diets"—During the beginning of adolescence, girls become self-conscious about their figure faults. Too often they will eat unwisely so as to acquire the figure they desire. The purpose of this bulletin board suggestion is to show these girls that they can eat wisely and still gain or lose weight as they wish. This will help to arouse the interest of the girls.

Procedure: Construct a balance scale from cardboard. Use string or wire to hold the two dishes or pans of the scale suspended from both ends of the scale. On construction paper draw an obese girl and a very thin girl. After the girls are made, place one girl on each of the scale dishes. Place the scale and girls in the center of the bulletin board. To the side of the obese girl post a sample low-calorie diet and post a sample high-calorie diet beside the thin girl.

Idea for a Bulletin Board*

# HOW FAR ARE WE ON THE ROAD TO GOOD BREAKFASTS?


GOOD HEALTH HIGHWAY
BEVERAGE BOULEVARD
BREAD AND CEREAL CLOVERLEAF
PROTEIN PASS
VITAMIN 'C' CUTOFF
FRUIT FREEWAY
CALORIE CORNER
BASIC '4' AVENUE

* A small car could be used to trace the progress of the entire class.

## TYPE OF EVALUATION WHICH MIGHT BE DEVELOPED FOR SOME HOME PRACTICES.

NAME ______________________________

DATE ____________________ GRADE ____________

### I. DESCRIPTION OF METHOD USED.

### II. RECIPE

A. INGREDIENTS

B. PROCEDURE:

C. SHAPE

D. PANS:

E. OVEN TEMPERATURE AND BAKING TIME:

### III. RESULTS:

A. YIELD

B. FLAVOR

C. TEXTURE

D. APPEARANCE

E. CRUMB

______________________________________________

STUDENT COMMENTS

______________________________________________

PARENT COMMENTS

## FOODS AND NUTRITION

### Texts and References

* = Teacher References

*American Home Economics Association. HANDBOOK OF FOOD PREPARATION. The Association, 1964. $1.00 641.5 no W

Batjer, Margaret and Atwater, Mimi. MEALS FOR THE MODERN FAMILY. Wiley, 1961. $5.75 642 no W

Cronan, Marion and Atwood, June. FOODS AND HOMEMAKING. Bennett, 1965. $6.60 642 no W

*Eppright, Ercel and others. TEACHING NUTRITION. 2nd ed. Iowa State University Press, Ames, 1962. $4.95 641.1 no W

*Fleck, Henrietta and Nunves, Elizabeth. INTRODUCTION TO NUTRITION. Macmillan, 1962. $7.50 641.1 no W

*Goodhart, Robert S. TEEN-AGERS' GUIDE TO DIET AND HEALTH. Prentice-Hall, 1964. $3.95 613.2 (W)

*Griswold, Ruth. THE EXPERIMENTAL STUDY OF FOODS. Houghton-Mifflin, 1962. $8.50 641 no W

Harris, Florence L. and Withers, Rex T. YOUR FOODS BOOK. Rev. ed. Heath, 1966. $5.96 641 no W

*Johnston, Betty J. EQUIPMENT FOR MODERN LIVING. Macmillan, 1965. $5.95 643.6 no W

*Kinder, Faye. MEAL MANAGEMENT, Rev. ed. Macmillan, 1962. $7.25 642 no W

Leverton, Ruth. FOOD BECOMES YOU. 3rd ed. Iowa State University Press, Ames, 1960. $4.50 Paper, Doubleday, 95¢ 641.1 no W

McDermott, Irene and others. FOOD FOR BETTER LIVING. Lippincott, 1960. $5.80 641 (W)

McLean, Beth B. MEAL PLANNING AND SERVICE. Rev. ed. Bennett, 1964. $4.80 642 (W)

Mickelsen, Olaf. NUTRITION, SCIENCE AND YOU. McGraw Hill, 1964. $2.50; library ed., $2.63 net, Scholastic Book Services, 1964. Paper, 50¢ 613.2 (W)

Oerke, Bess V. MEALTIME. Bennett, 1960. $5.44 641 (W)

Peckman, Gladys, Hovey, Helen S. and Lewis, Dora S. FAMILY MEALS AND HOSPITALITY. Macmillan, 1960. $5.56 642

*Peckham, Gladys. FOUNDATIONS OF FOOD PREPARATION. Macmillan, 1964. $7.75 641.5 no W

Peet, Louise. YOUNG HOMEMAKER'S EQUIPMENT GUIDE. 2nd ed. Iowa State University Press, 1962. $3.50 643.6 (W)

Pollard, Belle. EXPERIENCES WITH FOODS. Rev. ed. Ginn, 1965. $5.80 641 no W

*TEACHING FOODS ON THE MEAL BASIS. Bureau of Educational Research, College of Education, Michigan State University, East Lansing, n.d. 50¢

*U.S. Department of Agriculture. COMPOSITION OF FOODS. Agricultural Handbook No. 8. $1.50 (Order from the Superintendent of Documents). 641.1

White, Ruth. YOU AND YOUR FOOD. 2nd ed. Prentice-Hall, 1965. $7.50; text ed., $6.00 641 (W)

## AUDIO-VISUAL SOURCES

### Foods and Nutrition

Agricultural Extension Service, Audio-Visual Catalog, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101

### Films

Better Breakfasts, U.S.A. — 11 min., junior high
Freezing Green Beans — 5 min.
Freezing Peaches — 5 min.
Nutrition Sense and Nonsense — 21 min.
Wrapping Food for Freezing — 6 min.

### Slides

All About Pie — 72 slides
Batter Breads — 72 slides
Beautiful Cakes — 79 slides
Beef from Store to Table — 75 slides
Better Biscuits — 66 slides
Breads You Bake with Yeast — 81 slides
Cookie Wise — 86 slides
Family Enjoys Inviting Mealtimes 11 — 32 slides
Focus on Food Dollars — 75 slides
Food for Fitness — 24 slides
Freezing Fruits and Vegetables — 60 slides
How to Buy Meat — 131 slides
How to Cook Meat by Dry Heat — 50 slides
How to Cook Meat by Moist Heat — 50 slides
Hows and Whys of Home Canning — 73 slides
Jam-Boree with Frozen Fruits — 34 slides
Jelly Jewels — 45 slides
Mealtime Can Be Magic — 83 slides
Meat Cuts — Beef and Pork — 50 slides
Muffin Making — 73 slides
Sandwiches Please! 78 slides
Science Tells Why — Food Additives — 78 slides
Song of the Salad — 100 slides
Sure Jell Magic — 43 slides
Why Eat a Good Breakfast — 34 slides

Association Films, Inc., 561 Hillgrove Avenue, La Grange, Illinois

Better Bacon — 12 min.
Can You Carve? — 12 min.
Easy as Pie — 16 min.
Pantry Shelf Magic
The White Magic of Milk — 12 min.

Audio-Visual Education Service, Film Catalog, University of Minnesota, Minneapolis 14, Minnesota

How to Cook Eggs — 59 frames
How to Cook Meat by Dry Heat — 52 frames
How to Cook Meat by Moist Heat — 53 frames
How to Cook Turkey — 51 frames

**Encyclopedia Britannica Films**
Principles of Cooking — 11 min.

**Modern Talking Picture Service, 3 East 54th Street, New York 22, New York**
The ABC's of Beef Cookery and Can You Carve — 26 min.
Festival of Cheese Recipes — 22 min.
Let's Talk Turkey — 22 min.
Good Food, Good Health, Good Looks — 27 min.
Proof of the Pudding — 10 min. (Beginning nutrition study)

**National Canners Association, 1133 20th Street NW, Washington 6, D. C.**
Behind the Label — 13½ min.

**Wheat Flour Institute, Filmstrip Library, 309 West Jackson Blvd., Chicago, Illinois 60606 (loan or purchase)**
Quick Breads — 3 parts
    Part I: Biscuit Method — 43 frames
    Part II: Muffin Method — 39 frames
    Part III: Variety Round-up — 48 frames
The Trick of Yeast Rolls and Coffee Cakes — 60 frames
Sandwiches Please — 78 frames

**Young America Films, Inc., 18 East 41st Street, New York 17, New York**
Cooking: Measuring — 11 min.
Cooking: Planning and Organization — 11 min.
Cooking: Terms and What They Mean — 11 min.
Home Management: Buying Food — 11 min.

## ADDRESSES OF PUBLISHERS

American Home Economics Association. 1600 20th St. N.W., Washington, D. C. 20009

Bureau of Educational Research, College of Education, Michigan State University, East Lansing, Michigan

Charles A. Bennett Co., 237 Monroe Street North, Peoria, Illinois 60602

D. C. Heath and Co., 815 Prairie Avenue, Chicago, Illinois 60611

Ginn and Co., 205 W. Wacker Drive, Chicago, Illinois 60606

Houghton-Mifflin Co., Geneva, Illinois 60134

Iowa State University Press, Press Building, Ames, Iowa 50012

J. B. Lippincott Co., E. Washington Square, Philadelphia, Pa. 19105

Macmillan Co. (Division of Crowell-Collier Publ. Co.), 434 S. Wabash Ave., Chicago, Illinois 60605

McGraw-Hill Book Co., 330 W. 42nd St., New York, New York 10036

Prentice-Hall, Inc., Englewood Cliffs, New Jersey 17632

Scholastic Book Services, 902 Sylvan Avenue, Englewood Cliffs, New Jersey 17632

Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402

John Wiley and Sons, Inc., 605 3rd Avenue, New York, New York 10016

## ADDITIONAL RESOURCES FOR FOODS AND NUTRITION

American Institute of Baking
400 East Ontario Street
Chicago, Illinois 60611
*Request price order blank (helpful materials)

American Lamb Council
520 Railway Exchange Building
909 Seventeenth Street
Denver, Colorado 80202
*Request order form which includes:
- Wall Chart—Lamb Cuts
- Cuts of Lamb Booklet
- Nine Lessons in Lamb
- Teaching Lamb Cookery
- Notebook size lamb cuts chart

List of Films

American Spice Trade Association
76 Beaver Street
New York, New York 10005
The Magic of Spices 25¢

The Borden Company
350 Madison Avenue
New York 17, New York
- Good Teeth
- Principle Varieties of Domestic and Imported Natural Cheese
- Fact Sheet on Homogenized Milk
- Nutrition Progress Film:
  "Hail the Hearty" obtained from:
  Sterling Movies, Incorporated
  43 West 61st Street
  New York 23, New York
- Recipe Booklets

Home Economics Department
Campbell Soup Company
Camden, New Jersey 08101
- Modern Meal Planning with Convenience Foods
- Frozen Prepared Foods for Today's Living
- Good Meals to You

Mary Blake
Carnation Company
Department FM-104
Los Angeles 19, California
- Right Eating Keeps You Swinging
- What's Cooking with Evaporated Milk
  - Filmstrip, "Go, Grow and Glow with Carnation"
- Using Evaporated Milk in the Kitchen and Classroom

Cereal Institute, Incorporated
135 South LaSalle Street
Chicago, Illinois 60603
Request Reference List which includes:
- Breakfast Source Book
- Better Breakfast Activities
- Filmstrip: Why Eat a Good Breakfast (free)

Home Service Department
Best Foods Division
Corn Products Sales Company
717 Fifth Avenue
New York, New York
- Corn Syrup in Candy Making (Principles)
- Corn Starch Cookery (Principles)

Dairy Council of the Twin Cities
1550 West Larpenteur Avenue
St. Paul, Minnesota 55113
Contact for nutrition information or speaker if you live in this area

Del Monte
P.O. Box No. 4065
Clinton, Iowa
- Filmstrip and guide—Pictorial Meal Planning
- Create New Eating Fun with Vegetables

Food and Nutrition Department
College of Home Economics
Drexel Institute of Technology
Philadelphia, Pennsylvania
Comparison of Preparation Time and Costs for Convenience and Home Prepared Foods (research report)

Evaporated Milk Association
228 North LaSalle Street
Chicago, Illinois 60601
List of educational publications includes:
- How to Make a Baby's Formula
- Fact Sheet — Evaporated Milk
- Whipping Magic — with filmstrip
- Safety Is Up to You (child care)

General Foods Kitchens
250 North Street
White Plains, New York

General Mills, Department 360
400 Second Avenue South
Minneapolis, Minnesota 55440
- How to Master the Art of Pastry Making
- How to Master the Art of Muffin Making
- How to Master the Art of Mealtime Planning
- How to Master the Art of Making Frostings
- How to Master the Art of Making Cookies
- How to Master the Art of Making Angel Food and Chiffon Cakes
- How to Master the Art of Cake Making
- How to Master the Art of Making Yeast Breads
- How to Master the Art of Making Biscuits

Girl Scouts of the USA
830 3rd Avenue
New York, New York
"Cooking Out of Doors" $1.95 (catalog #19-533)

Grocery Manufacturers of America, Inc.
205 East 42nd Street
New York, New York 10017
- The Label Tells the Story
- Your Grocery Dollar

Public Relations Department
Education Section
H. J. Heinz Company
Box 57
Pittsbugh, Pennsylvania 15230
Teaching Aids including:
- Filmstrips
- Nutritional Material
- Child Care Booklets

Home Economics Institute
Hotpoint
5600 West Taylor Street
Chicago 44, Illinois
  Spotlight on Hotpoint Electric Ranges
  Spotlight on Hotpoint Refrigerators and Freezers

International Milling Company, Incorporated
1200 Investors Building
Minneapolis, Minnesota 55415
  Educational Packet

Kellogg Company
Home Economics Services, Department WN-1064
Battle Creek, Michigan 49016
  Foods for Growing Boys and Girls
  The Best Breakfast to You Guide

Kerr Glass Manufacturing Corporation
Department 866
Sand Springs, Oklahoma
  10 Short Lessons in Canning and Freezing
  Kerr Home Canning Book and How to Freeze Foods

Knox Gelatin, Incorporated
Education Department, Box WN24
Johnstown, New York
  Gel It
  Know On-Camera Recipes
  What Is Gelatin
  A More Attractive You

Home Economics Department
Libby, McNeill and Libby
Chicago, Illinois 60604
  Mary Hale Martin Portfolio which includes:
    "The Art of Salad Making"
    "Kitchen Chatter"

Mrs. Peggy Walton, Manager
Women's Activities Program
Manufacturing Chemists' Association, Incorporated
1825 Connecticut Avenue NW
Washington, D. C. 20009
  Everyday Facts About Food Additives
  Food Additives—What They Are/How They Are Used and Users Guide
  Filmstrip and Record: Science Tells Why Food Additives
  Filmstrip and Record and Users Guide: Food Through the Ages

McCormick and Company, Incorporated
Schilling Division
301 Second Street
San Francisco, California 94107
  McCormicks Map of the World
  Extract Flavor Magic
  Spice and Herb Magic
  Spices — What Are They
  A History of Spices
  Filmstrip: Secrets of Seasoning from Five Countries — $3.00

Minnesota Turkey Growers Association, Incorporated
1563 University Avenue
St. Paul, Minnesota 55104
  Turkey in the Bag
  How to Carve Turkey
  Homemaker's Turkey Handbook
  Turkey Handbook—$1.00
    (for food buyers, dietitians, for example)

National Canners Association
Consumers Service Division
1133 - 20th Street NW
Washington, D. C. 20036
  Films About the Canning Industry
  List of School Publications including:
    It's on the Label
    Focus on Canned Foods
    Using Canned Foods

National Dairy Council
111 North Canal Street
Chicago 6, Illinois
  *Catalogues on "Health Education Materials"
  Nutrition News

National Livestock and Meat Board
36 South Wabash Avenue
Chicago, Illinois 60603
  Publication and film catalog on meat includes:
    Lessons on Meat
    Pork, Beef, Lamb Charts
    Facts About Meat, Beef, Pork, Lamb
    Meat Nutrition Wheel

National Vitamin Foundation
250 West 57th Street
New York 19, New York
  Vitamins and Your Health

Oxboro Heath Company
7516 - 42nd Avenue North
Minneapolis, Minnesota 55428
  Freezing Foods at Home

Home Economics Department
Pet Milk Company
St. Louis 66, Missouri
  Meal Planning Guide
  Frozen Desserts
  Cakes
  Candies
  Cookies
  Pies
  Let's Bake Bread

The Pillsbury Company
Box 1408, Department 105
Minneapolis, Minnesota 55460
  Request order blank which includes:
    Educational fact sheets
    Teaching kits

Proctor and Gamble
Home Economics Department
P. O. Box 322
Cincinnati, Ohio
  Proper Frying
  Proper Baking
  Mixing Magic

Mary Alden, Home Economics Department
The Quaker Oats Company
Merchandise Mart Plaza
Chicago, Illinois 60654
  Quaker Oats (educational bulletin)

Red Star Yeast
Home Service Department

433 E. Michigan Street
Milwaukee, Wisconsin 53201
  Baking the Batter-Way
  Holiday Breads
  Fun with Yeast
  Red Star Manual on Yeast Baking

Education Department
Seventeen
320 Park Avenue
New York 22, New York
  Supermarket Tour Guide
  Cooking with Know-How
  Six Situations in Search of a Teen Cook
  Charts: Teens Choose Foods for Vitality
  Understanding the Why Behind Food Concepts and Generalizations

Standard Brands, Incorporated
Room 1212
420 Lexington Avenue
New York 17, New York
  Includes:
    Wall Charts
  Fleischmann Treasury of Yeast Baking
  Have Fun Making Rolls
  Our Daily Bread
  Royal Guide — Flavored Gelatins, Techniques and Uses

Home Economics Department
Stokely-Van Camp, Incorporated
941 N. Meridian Street
Indianapolis, Indiana 46206
  What's In the Food?
  Fruits and Vegetables for Vitality

Sugar Information, Inc.
P. O. Box 2664, Grand Central Station
New York, New York 10017
  "Add Sugar"

Martha Logan, Home Economist
Swift and Company
Box 2121
Chicago, Illnois 60609
  *Request list of educational materials which include:
    Filmstrips:
      How to Buy Meat
      Martha Logan's Meat Handi-book

United Fresh Fruit and Vegetable Association
777 - 14th Street NW
Washington, D. C. 20005
  Nutritive Value of Fruits and Vegetables — 25c

Consumer and Food Economics Research Division
Agricultural Research Service
U. S. Department of Agriculture
Washington, D. C.
  Nutrition Program News (newsletter)
  Family Economics Review, October, 1964

Superintendent of Documents
U. S. Government Printing Office
Washington, D. C. 20402
  No. 1 — Family Fare: Food Management and Recipes
  No. 90 — Conserving the Nutritive Values in Foods
  No. 10 — Home Freezing of Fruits and Vegetables
  No. 72 — Nutritive Value of Foods

Agriculture Extension Service
University of Minnesota
St. Paul, Minnesota 55101
  HN108 — Shopping for Your Family's Food
    222 — The Cost of Convenience: Which Food to Buy

Wheat Flour Institute
309 West Jackson Boulevard
Chicago, Illinois 60606
  Publications include:
    Weight Control the Module Way
    Look at Snack Foods
    *Eat to Live
    Shield of Good Health — Chart
    A Kernel of Wheat — Chart
    Filmstrips

Whirlpool Corporation
Home Service Department
Benton Harbor, Michigan 49023
  Bulletins on use and care of major appliances
  Text on Freezing Foods — 15c

Wish-Bone Teaching Aids
Box 9209
St. Paul, Minnesota
  Creative Salad Making

## NUTRITION

### A Lesson Plan for Grade 7 — Foods on the Meal Basis

**Objective:** Ability to analyze ways in which food contributes to health and appearance.

**Introduction:** Yesterday, Miss Fox, our lunchroom supervisor, talked to us about how the food we eat can affect many parts of our life. She also answered many of the questions which you had about food and its relationship to health and appearance. Now let us see if we can identify some of the ways in which food is related to health, appearance, and personality.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| When people can be helped to realize the relationship of nutrition to the values they hold, they may be interested in improving food habits. | List characteristics of health and personality which relate to nutrition. | Chalkboard. |
| | Questions to stimulate ideas might include: | Basic 4 chart. |
| | 1. What is the meaning of nutrition? health? personality? | Reference books. |
| Nutrition affects one's appearance by its influence on different parts of the body and the characteristics which relate to appearance. | 2. What were your sources of information?<br>3. What are the characteristics of persons who have good nutrition? health? personality?<br>4. Is this what you mean?<br>5. Are the definitions adequate for our needs? | |
| Adequate nutrition can be obtained with many combinations of food commonly available throughout the world. | 6. Is that statement reliable?<br>7. Is it a fact or opinion?<br>8. Are you assuming that ———?<br>9. What difference do these factors make to you? | |
| | Ask each student to read "The Case of Bobby — A Problem Child." Consider the questions listed at the beginning of the story. | Mimeographed sheet with case study and study questions. |
| | After reading the story, divide into small discussion groups. Consider one of the questions listed at the end of the story. Choose one student to report the answers with further questioning when needed. | |

**Summary:** This gives us something to think about. Each one of us will need to consider the relationship of these characteristics to our own food pattern so let's summarize our thoughts about the relationship of nutrition to health and appearance.

**Assignment:** We will be relating what we have discussed these last two days to the meal patterns we have planned for our foods unit. Since the first meal pattern we decided to prepare included snack foods, tomorrow bring pictures of snack foods to class. Identify the Basic 4 food groups present in each. Be prepared to discuss these with the class.

### THE CASE OF BOBBY — A PROBLEM CHILD

**Questions to consider as you read:**

1. What foods do you eat regularly that were not included in Bobby's diet?
2. What signs of inadequate health are discussed here?
3. Why do you think Bobby was cross at home?
4. How did Bobby's health improve after he started drinking milk?

This is the story of a boy who is not yet twelve years old. Bobby has nine sisters and brothers, three older than he. His family lives on a diet which consists chiefly of cornbread, biscuits, fat pork, beans, and sugar. Sometimes they have turnip greens, corn, tomatoes, and berries in season. Bobby seldom had any milk, eggs, meat, fish, or cheese until he was eight years old. At the age of five he was very small for his age, and was nervous, and had skin disorders such as a bad rash. His mother reported that he had cracks at the corners of his mouth. She also said that at times his tongue was sore and red. During the next three years, his mother complained that he was cross and unruly most of the time. His teacher stated that he did not concentrate on his school work, had poor grades, and was quarrelsome.

When Bobby was eight years old, it was decided that he should be given skim milk regularly in addition to his regular diet. During the first three years following, there was little change in his lips and tongue condition, his disposition, or his grades. Following that year, gradual improvement in lips and tongue symptoms were noted. His mother reported great improvements in his disposition. His teachers said that he could concentrate better on his studies, his school grades improved, and his behavior was good. Bobby was still underweight and his growth rate was slow, but there were many signs of improvement.

**Topics for Small Group Discussion:**

1. What foods were eaten by this family? What does this tell you about the family? Where do you think they lived?

2. Which foods that you eat regularly are missing from the diet of this family? What foods that are listed on the Basic 4 chart are missing from this diet? Did Bobby have an adequate diet after the milk had been added? Why or why not?

3. How was Bobby's health related to his behavior? To his school grades? Have you ever been cross or irritable when you have been ill, over-tired, or missed a meal?

   What do you think might have happened to Bobby if his diet had not been improved?

4. Why did it take so long for improvement in Bobby's health?

   What was the reason for adding skim milk to the diet?

   How do you think this will affect Bobby's health in the future.

## FOODS AND NUTRITION

### A Lesson Plan for Grade 8

**Generalization: Essential properties of foods may be changed by methods of preparation and storage.**

**Objective: Determine implications of temperature and form of food on the properties of food.**

Previous learnings include comprehension of facts about nutrients. A reading assignment has given knowledge necessary for this lesson.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| Milk contains many nutrients needed by the body. | Why is milk considered such an important food? | List on chalkboard as given by students. |
| | What nutrients does it contain? What purposes do these nutrients serve in the body? | |
| Milk is used in many recipes and foods such as ice cream and cheese. | How much milk is recommended for you to include in your daily diet? | |
| Chemical reactions cause milk to sour. | In what ways may you use milk? | |
| Milk is a good medium for bacterial growth. | How should fresh milk be stored? | |
| | Why do milk and milk products need refrigeration? | |
| Milk may be purchased in several forms:<br>fresh, whole, or skim or 2 per cent powdered skim, evaporated, and condensed. | In what forms is milk purchased? How do these forms differ? | Display whole, skim, dry, evaporated, and condensed forms of milk. |
| | What particular uses can you suggest for each form? | |
| | Could you use different forms for a particular purpose? Explain. | |
| While certain forms of milk are particularly well suited to certain purposes, forms often can be interchanged. | | |
| | Heat whole milk over direct high heat in saucepan, in double boiler, and in saucepan over thermostatically controlled heat set at 200°. Allow milk on high heat to boil. Pour milk into bowls; students observe pans, then put very hot water in one pan and cold water in another. Let stand during this discussion. | Use fresh, whole milk.<br>2 saucepans<br>1 double boiler<br>3 bowls<br>spoons for tasting |
| Protein is toughened by high temperature. | What changes do you see in the milk? Taste? Smell? | |
| | Can you suggest changes we cannot observe? | |
| Milk sugars scorch at high temperature. | What happened to the pan? | |
| Vitamins are destroyed by high temperature. | Can you explain the changes? | |
| | What does this tell you about making cocoa? Cream soup? Pudding? | |
| The double boiler prevents food from reaching boiling temperature. | Would this apply to any other foods? Which others? Why? | |
| | What purpose did the double boiler serve? | |
| The thermostatically controlled unit eliminates the need for a double boiler. | For what other foods would you consider using it? | |
| | Why were the results the same with the controlled heat unit as with the double boiler? | |
| Protein substances dissolve in cold water. | Students observe relative ease of washing pans soaked in cold and hot water. | |
| | Why is the pan soaked in cold water easier to clean? | |
| | To what other foods will this apply? | |
| Heat can be controlled by several means. | Distribute cocoa recipes. Explain. Working in partners, students prepare cocoa. Some groups use direct heat, some double boilers, some thermo unit; half | Recipes, ingredients, and utensils are ready to use. |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| | use fresh whole milk, others use diluted evaporated milk. | Summarize results on chalk board. |
| | Compare results. | |
| | Summarize. | |
| | What have we found about the effect of temperature on milk? | |
| | In what ways can we control the temperature? | |
| Processing and change of composition give different forms of milk different flavors. | What general statement can be made about the form of milk used in a particular recipe? | |
| | Assignment: | |
| | Bring to class a favorite recipe which uses milk. Answer these questions about it: | |
| | How do the directions apply what has been learned about the effect of temperature on milk? | |
| | In what form is the milk used? | |
| | Could another form of milk be used? Explain. | |

## MEAL PLANNING (Nutrition)

### Lesson Plan for Grade 9

**Objectives:** Judgment in planning and choosing foods that meet one's own daily food needs.

An increased interest in maintaining good food habits and making good food choices.

**Introduction:** A food is made of different parts called "nutrients." In order to make wise decisions about what foods to buy and to use in meals, we decided in planning our unit that we needed to know what the body needs and what foods provide the nutrients that meet these needs.

Note — An overall picture and discussion of the nutrients could be presented within this one class period; however, this would not end your nutrition study but instead you would be constantly referring to it and its relationship to the rest of the foods work. Students have had a study assignment previous to this class period.

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
| The Basic 4 food groups and the nutrients within make a unique contribution in nourishing one's physical, mental, and emotional growth.<br>Supporting facts:<br>1. All nutrients have a function in the body and a source in foods.<br>2. Great importance lies in a well-planned and balanced diet.<br>3. Each food group has a specific contribution to one's well-being but all groups must work together.<br>4. Diet deficiencies result in harmful effects.<br>5. The recognition of the caloric content of different foods is essential if one is to include all the food groups and still maintain one's best weight. | From a transparency showing a chart, discuss the nutrients found in the Basic 4 groups and the ways in which these apply to the daily diet.<br>1. From your reading, what definition was given for "nutrients?"<br>2. What are the nutrients found in our foods?<br>3. Which of the nutrients are found in each of the Basic 4 food groups?<br>4. What does this tell us about the classification of our foods?<br>5. What contribution does each nutrient make to our general health?<br>6. What is the meaning of the word "diet?"<br>7. What misconceptions do people sometimes have about diets? Why?<br>8. When someone tells you that you need to have a balanced diet, how do you react? Why?<br>9. What would be a balanced diet for you?<br>10. How much do we need from each food group?<br>11. How many calories do you need? Why? | Transparency.<br>You and Your Food —<br>White Dairy Council materials —<br>"Girls Daily Life."<br>"Ventures, Voyages, Vitamins."<br>"Guide to Good Eating."<br>Kellogg Co. — "Choose Your Calories Wisely."<br>General Foods Corporation— Food chart.<br>Metropolitan Life Insurance Co. —<br>"Nutritive Values Purchasing Guide." |
| | Discussion of school lunch menus of previous week.<br>1. What food nutrients did they include?<br>2. What other foods would you need to eat each day in order to have a balanced diet?<br>3. Therefore, what assumptions have been made?<br>4. What comparison could you make between the school lunch menus and your lunch on Saturday or during the week? | School lunch menus. |
| | Discussion of food records kept for yesterday. Analysis:<br>1. What Basic 4 food groups were sufficiently met?<br>2. If you did not eat a balanced diet, what other foods might have been included? Why?<br>3. What suggestions would you make to change your diet? What is your basis for this decision? | |

| CONTENT | EDUCATIONAL EXPERIENCES | IDEAS FOR EVALUATION |
|---|---|---|
|  | Divide students into buzz groups and hand out sample diets with missing foods. Evaluate.<br>1. What food groups have sufficient servings? Which are inadequate?<br>2. What possible diet deficiencies might occur if some of these requirements are not met?<br>3. What variations might there be in family diets? Why?<br>4. How may some of our personal characteristics be related to the foods we eat?<br>Present evaluations to class for further questions and discussion. | Sample diets. |

Summary: How does an understanding of the contribution of food nutrients to our health affect the planning of our daily food intake?

Assignment: Write an evaluation of the menu patterns developed in our previous class session as to the adequacy of meeting your daily food requirements.

# FOODS AND NUTRITION

## Lesson Plan for Grade 10

**Objective:** Ability to plan menus that will meet the protein requirement of family members.

**Introduction:** In our study of human nutrition thus far we have been concerned with the general food requirements. Today we will be discussing one of the food nutrients — protein. Students have had study assignments.

### CONTENT

Similarities in physical structure and chemical composition of foods are the bases for their classification, handling, and processing.

A nutritious diet consists of adequate amounts of all nutrients.

The Food and Nutrition Board of the National Research Council has recommended amounts of protein daily for healthy persons:

Each nutrient has specific functions and also influences the functioning of other nutrients.

The amount and kind of nutrients needed by individuals vary and are influenced by heredity, age, sex, size, activity, climate, and their physical and emotional state.

Basic to the development and evaluation of adequate food patterns is knowledge of the nutrients needed by the body and their sources in available foods.

### EDUCATIONAL EXPERIENCES

Discussion of protein and its contribution. Include following types of questions:

1. What are amino acids?
2. What is a complete protein? An incomplete protein?
3. How do animal sources of protein compare in food value with plant sources of protein?
4. What are some common foods that are high in protein?
5. What are the protein needs of youth? How do they compare with protein needs of children and adults?
6. What influences our protein needs?
7. Why is it recommended that we meet this protein requirement?
8. How are complete and incomplete proteins combined in our meals to meet protein requirements?
9. What are some low quality protein dishes which might be included in our menus?
10. What comparisons can we make with various dishes prepared with meat, eggs, cheese, legumes, and peanut butter.
11. What salads, sandwiches, and desserts would you serve with these low quality protein dishes in order to provide an adequate amount and quality of protein in the diet?
12. What are the functions of protein in our body?
13. How do they influence other nutrients?

Various types of problems relating to protein requirements given on slips of paper. Each student draws and plans a menu for one day. Presents to class for discussion. Could include:

1. Low quality protein dishes
2. Teen-age girl
3. Teen-age boy
4. Infant
5. Grade school girl
6. Grade school boy
7. Male adult
8. Female adult
9. Others

### IDEAS FOR EVALUATION

Class references.

Bulletin board.

Food models used to display the combination of complete and incomplete protein in meals to meet daily protein requirements for different family members.

Problems on slips of paper.

**Summary:** What principle could we develop relative to the effect of protein on our diet?